# TC-K611S/K707ES/K711S

# **SERVICE MANUAL**



Photo: TC-K611S

US Model Canadian Model

TC-K611S/K707ES

AEP Model TC-K611S/K711S

UK Model TC-K611S

> E Model TC-K707ES

Australian Model

TC-K611S/K707ES

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

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Model Name Using Similar Mechanism		TC-K679ES/K690
	TC-K611S	TCM-200V15
Tape Transport Mechanism Type	TC-K707ES	TCM-200V16
Wicchamsm Type	TC-K711S	TCM-200V17

#### **SPECIFICATIONS**

Recording sy	ystem
Fast winding	time

4-track 2-channel stereo

Approx. 90 sec. (with Sony C-60

cassette)

Bias

AC bias

Heads

Erasing head × 1

(TC-K707ES/K711S: S&F head, K611S: F&F head) Recording head × 1 (SD head)

Playback head × 1 (TC-K611S/K711S: SD head, K707ES: LA head)

Motors

Capstan motor ×1 (DC servo motor)

Reel motor × 1 (DC motor)

Assist (mechanism drive) motor × 1

(DC motor)

Signal-to-noise ratio (at peak level and weighted)

			,
Cassette (Dolby NR off)	Type IV (Sony ES-IV)	Type II (Sony UX-S or UX)	Type I (Sony HF-S)
	61 dB	59 dB	57 dB

S/N ratio improvement (approximate values)

With Dolby B NR on: 5 dB at 1 kHz; 10 dB at 5 kHz With Dolby C NR on: 15 dB at 500 Hz; 20 dB at 1 kHz With Dolby S NR on: 10 dB at 100 Hz; 24 dB at 1 kHz

Harmonic distortion

0.4% (with Sony HF-S, 160 nWb/m,

315 Hz, 3rd H.D.)

1.5% (with Sony ES-IV, 250 nWb/m, 315 Hz, 3rd H.D.)

STEREO CASSETTE DECK

Frequency response (Dolby NR off)

Type IV cassette (Sony ES-IV)	TC-K707ES: 20—21,000Hz (±3dB, IEC) TC-K611S/K711S: 20—20,000Hz (±3dB, IEC) 20—16,000Hz [±3dB(-4dB recording)]
Type II cassette (Sony UX-S or UX)	TC-K707ES: 20—19,000Hz (±3dB, IEC) TC-K611S/K711S: 20—18,000Hz (±3dB, IEC)
Type I cassette (Sony HF-S)	20-17,000 Hz (±3 dB, IEC)

Wow and flutter

±0.09% W.Peak (IEC) 0.05% W.RMS (NAB)

±0.14% W.Peak (DIN)

Inputs

Line inputs	Sensitivity 0.16 V	
(phono jacks)	Input impedance	47 k ohms

Outputs

Line outputs (phono jacks)	Rated output level	0.5 V at a load impedance of 47 k ohms
	Load impedance	Over 10 k ohms
Headphones (stereo phone jack)	Output level	0 - 3 mW at a load impedance of 32 ohms
	—Co	ntinued on next page—

SONY

#### SAFETY CHECK-OUT

General

Power requirements US, Canadian model: 120V AC, 60Hz

AEP, German model: 220-230V AC,

50/60Hz

UK, Australian model: 240V AC, 50Hz

E model: 120V, 220V, and 240V AC

adjustable, 50/60Hz

Power consumption

Dimensions

21 W Approx. 430 × 123 × 306 mm (w/h/d)

 $(17 \times 4^7/_8 \times 12^1/_8 \text{ inches})$ 

including projecting parts and controls

Mass

TC-K707ES/K711S:

Approx. 5.0kg (11 lbs 1 oz)

TC-K611S:

Approx. 4.8kg (10 lbs 10 oz)

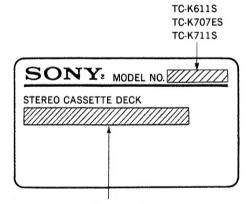
#### Supplied accessories

Audio connecting cords (2)

Design and specifications are subject to change without notice.

#### MODEL IDENTIFICATION

-Specification Label-



US, Canadian model: AC 120V 60Hz 21W

AEP, German model : AC 220-230V~50/60Hz 21W

UK, Australian model: AC 240V~50/60Hz

E model : AC 120, 220, 240V~50/60Hz 21W

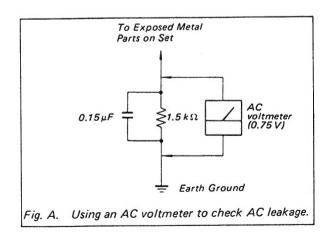
After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

#### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
- 2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
- 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)



#### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK A OR DOTTED LINE WITH MARK ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

### ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE A SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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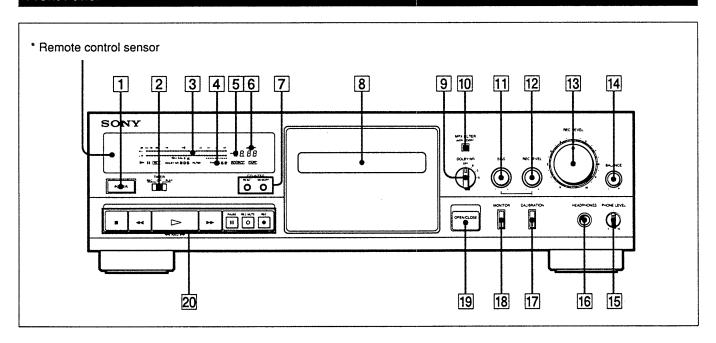
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# SECTION 1 GENERAL

This section is extracted from instruction manual.

### **Identifying the Parts**

#### **Front Panel**



For details, refer to the page number(s) indicated in parentheses.

- 1 POWER switch
- 2 TIMER switch (page 16)
- 3 Peak level meter (page 13)
- 4 Tape TYPE indicator
- 5 Linear counter (page 10)
- 6 MEMORY indicator
- 7 COUNTER buttons
  RESET button (page 10)
  - MEMORY button (pages 9 and 10)
- 8 Cassette holder
- 9 DOLBY NR (noise reduction) switch (pages 7 and 11)
- 10 MPX FILTER button (page 13)
- 11 BIAS control (pages 14 and 15)
- 12 REC (recording) LEVEL control for calibration (pages 14 and 15)
- 13 REC (recording) LEVEL control (pages 11 and 13)
- 14 BALANCE control (page 11)
- 15 PHONE (headphones) LEVEL control (page 7)
- 16 HEADPHONES jack (stereo phone jack) (page 7)
- 17 CALIBRATION button (page 14)
- 18 MONITOR button (page 13)

- 20 Tape operation buttons
  - (stop) button
  - ◄ (rewind) (Multi-AMS\*\*) button
  - (play) button
  - ►► (fast-forward) (Multi-AMS\*\*) button
  - II PAUSE button
  - O REC MUTE (record muting) button (page 16)
  - REC (recording) button

#### \*Remote control sensor

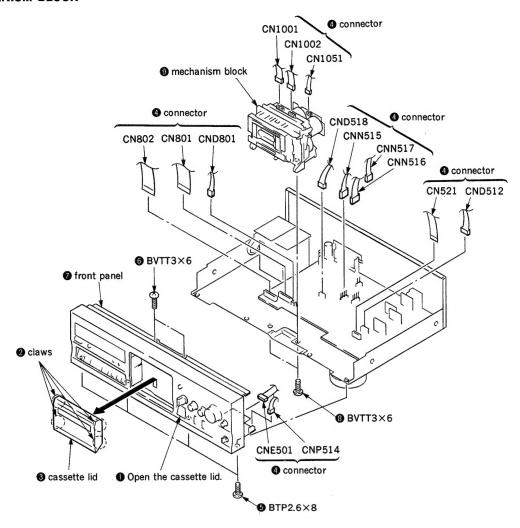
You can remotely control this cassette deck with:

- A remote commander that came with a Sony amplifier or receiver if it has the mark and cassette deck control capability.
- An optional Sony remote commander with the mark and cassette deck control capability.
- \*\*AMS is an abbreviation for Automatic Music Sensor.

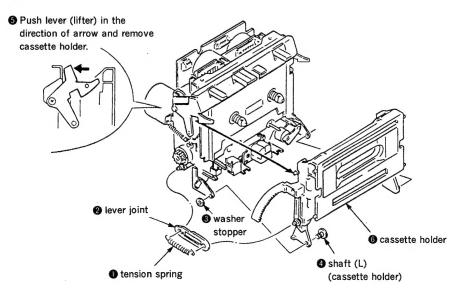
# SECTION 2 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

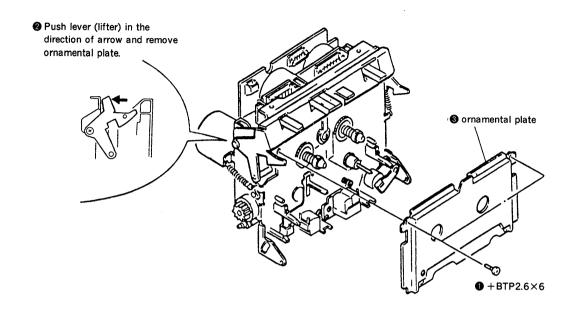
#### 2-1. MECHANISM BLOCK



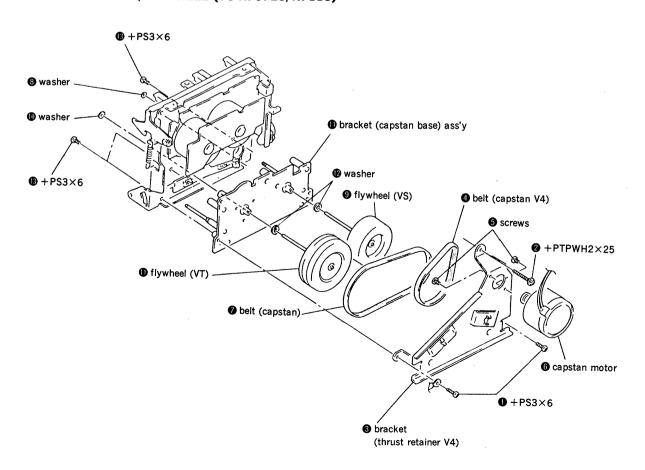
#### 2-2. CASSETTE HOLDER



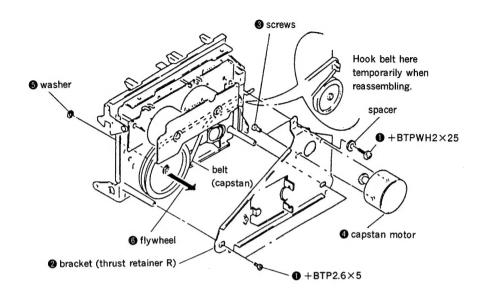
#### 2-3. ORNAMENTAL PLATE



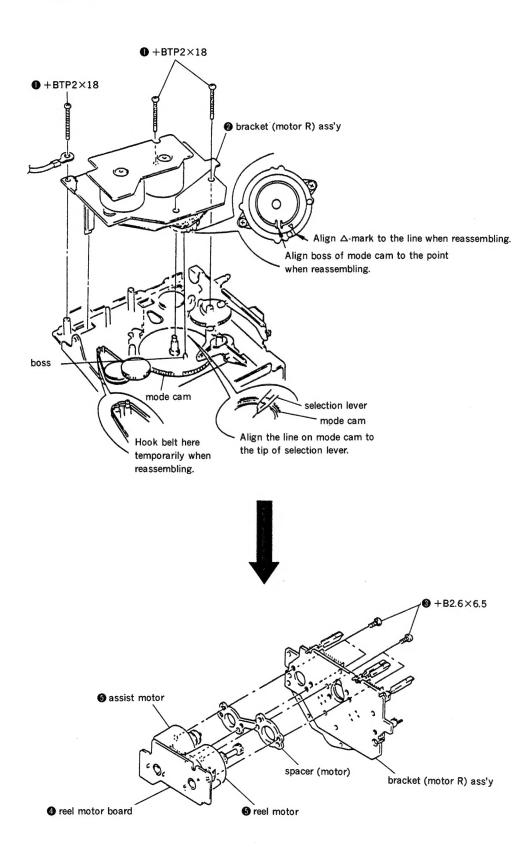
### 2-4. CAPSTAN MOTOR/FLYWHEEL (TC-K707ES/K711S)



### 2-5. CAPSTAN MOTOR/FLYWHEEL (TC-K611S)



#### 2-6. REEL AND ASSIST MOTORS



# SECTION 3 MECHANICAL ADJUSTMENTS

#### **PRECAUTION**

1. Clean the following parts with a denatured-alcohol-moistened swab:

record/playback head

pinch roller

erase head

rubber belts

capstan

idler

- Demagnetize the record/playback head with a head demagnerizer.
- 3. Do not use a magnetized screwdriver for the adjustments.
- 4. After the adjustments, apply suitable locking compound to the parts adjusted.

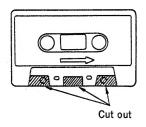
#### Tape Path Adjustment

Note: When using the adjustment methods for other than replacement reasons, please do not tamper unnecessarily with the adjustment screws or the erase head because either the supply pinch roller guide or the record/playback head will be made the standard tape paths. Moreover, when it is necessary to adjust and replace two or more of any of the heads and/or pinch rollers, replace them one by one, completely taking out the first tape path, and then replacing the second one.

#### Preparation:

 Mirror cassette CQ009C 8-909-708-01 (or CQ012C 8-909-708-02)

If one does not have this, cut out the sections of a 120-minute cassette shell as indicated below and use that cassette.



2. Phillips screwdriver (medium-size):

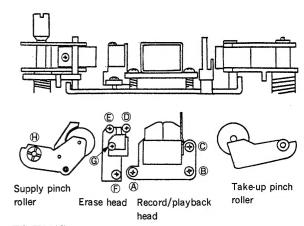
For the head adjustment screws Blade-type screwdriver (large-size):

For the supply pinch roller adjustment screws

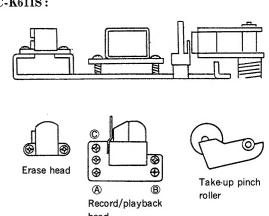
- 3. Pen light
- 4. WS-48B (3kHz, 0 dB)
- 5. P-4-A100 (10kHz, -10dB)

**Adjustment Position:** As seen from the cassette, side (top) and MD as seen head on (bottom).

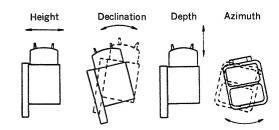
#### TC-K707ES/K711S:



TC-K611S:



**Definition of Terms:** The figures are of a record/playback head.



#### Adjustment Method:

#### Supply Pinch Roller

**Note:** Only perform this adjustment when the supply pinch roller is to be raplaced.

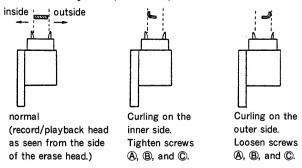
- 1. Insert the mirror cassette and put the unit in record/playback mode.
- 2. Check to see whether the tape is curling at the record/playback head guide or the pinch roller guide.

  If it is curling, remove the curl by adjusting the ® tape curl adjustment screw. Then, check that the tape is running past the middle of the erase head.

#### Record/playback Head

**Note:** Only perform this adjustment when the record/playback head is to be replaced.

- 1. Insert the mirror cassette and put the unit in record/ playback mode.
- 2. (Height Adjustment) Check to see if the tape is curling at the tape guide of the head. If it is curling, tighten screws (A), (B), and (C), respectively by the same angle, moving the head so that it remains at the same angle through out the procedure. If it curls on the bottom side of the mirror cassette (actually the inner side), tighten all the screws equally; but loosen them if the tape begins to curl on the top side (outer side).



3. (Declination Adjustment) While in the record/playback position, set the back tension to 0 (wind the supply reel with something thin like a pencil in a counterclockwise direction) and make sure there is no curling or shifting (shifting up/shifting down) at the guide of the record/playback head.

Becuase shifting can only occur due to a difference in the width of the tape and that of the tape guides (curling will otherwise occur), it is necessary to pay close attention since it can be easily overlooked.

When there is a shift, tighten screws ® and © equally and change the declination of the head. If the tape is shifting up, tighten the screws, and if it is shifting down, loosen them.

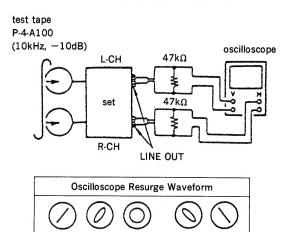
- 4. Repeat the adjustments in steps 2 and 3 and fine adjust the height and the declination.
- 5. (Preliminary Azimuth Adjustment)

After demagnetizing and cleaning the adjustment head, playback WS-48B (3kHz, 0dB).

Turn screw © so that the reading on the level meter of the unit or that of the level meter connected to LINE OUT is maximized.

If the screw is turned at least half a revolution, repeat the adjustments from step 1.

6. (Tape Path Check) Connect the oscilloscope to LINE OUT and play back P-4-A100 (10kHz, -10dB) to display a resurge waveform. After 20 seconds of record/play-back (after the tension within the loop has been increased sufficiently), make sure the variation in the resurge is within ±90 degrees (within ±45 degrees is desired). If the declination and /or the height adjustment is not perfect. Repeat the adjustments from setp 1.



135°

Wrong

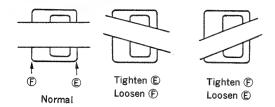
In Phase 45°

Good

#### Erase Head

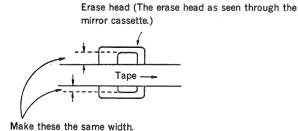
**Note:** Only perform this adjustment when the erase head is to be replaced.

- 1. Insert the mirror cassette and put the unit in record/playback mode.
- 2. (Azimuth Adjustment) Adjust the azimuth of the erase head by adjusting screws © and © so that the tape runs as evenly as possible.

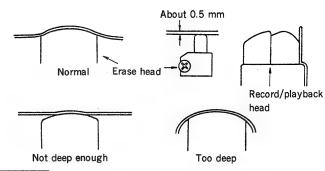


(The erase head as seen when erasing the mirror cassette.)

3. (Height adjustment) Turn screws ①, ②, and ③ all by the same angle so that the portions of the erase head visible at top and bottom are nearly of equal width. If the width at the top is greater, tighten the screws; if the width at the bottom is greater, loosen the screws.



- 4. (Declination Adjustment) Leaving it in the playback position, put the back tension to 0 and make certain the erase head part and supply pinch roller guide part do not shift. If there is a shift, turn the screw ① and change the declination.
  - Looking at it using the mirror cassette, if the tape shifts up, tighten the screw, and if it shifts down, loosen the screw.
- 5. Repeat the adjustments beginning with step 2 and fine adjust the height and declination. And make sure the tape does not curl up on the pinch roller guide or the guide part of the record/playback head.
- 6. (**Depth Adjustment**) In order to make the entire head play the tape smoothly, and to make sure the depth of the erase head is neither too shallow nor too deep, loosen screw © a bit.



#### Check

- Check to make sure that there are no curls or shifts through out the whole tape path and that the tape runs smoothly.
- Reapply the locking compound to the adjusted screws.
   (The locking compound should only be applied to screw
   after the azimth has been adjusted.)

#### **Torque Measurement**

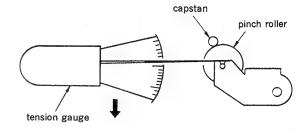
Torque	Torque meter	Meter reading
FWD	CQ-102C	30-60g°cm (0.42-0.83 oz°inch)
FWD Back tension	CQ-102C	1-5g*cm (0.014-0.069 oz*inch): TC-K611S 7-11g*cm (0.097-0.153 oz*inch): TC-K707ES/K711S
FF, REW	CQ-201B	65—90g·cm (0.90—1.25 oz·inch)

#### Pinch Roller Pressing Force Measurement

Mode: playback

Hook needle of the tension gauge to the pinch roller shaft and push back pinch roller to detach it from capstan. Then, return it gradually to capstan and read the gauge when the pinch roller begins turnning.

#### Standard Limits:



# SECTION 4 ELECTRICAL ADJUSTMENTS

**Note:** The adjustment should be performed in the order given in the service manual. As a rule, adjustments about playback should be performed before those about recording.

The adjustments should be perforned before for both L-CH and R-CH.

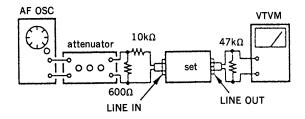
 Switches and controls shoud be set as follows unless otherwise specified.

DOLBY NR switch: OFF MPX FILTER switch: OFF MONITOR switch: Tape

• Standard Record:

Deliver the standard input signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level.

#### -Record Mode-



#### 0dB=775mV

#### Standard Input Level

input terminal	LINE IN
source impedance	10kΩ
input level	0.5V (-3.8dB)

**Standard Output Level** 

output termial	LINE OUT
load impedance	47kΩ
output level	0.5V (-3.8dB)

**Test Tape** 

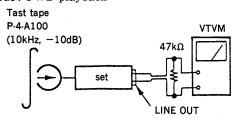
Type	Signal	Used for
P-4-A100	10kHz, -10dB	Azimth Adjustment
P-4-L300	315Hz, 0dB	PB Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

#### **Test Mode**

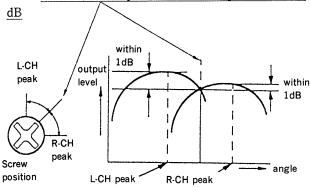
This set will get into test mode by shorting the pins of CNE702 (TEST) on MAIN board before turning the power on.

### Record/Playback Head Azimuth Adjustment Procedure:

1. Mode: FWD playback



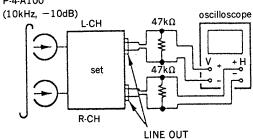
2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1



3. Phase Check

Mode: playback

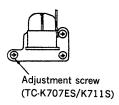
test tape P-4-A100

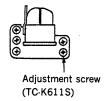


Scree	n pattern
in phase 45° 90	135° 180°
Good	Wrong

4. After the adjustment, lock the screws with locking compound.

Adjustment Location: Record/Playback head

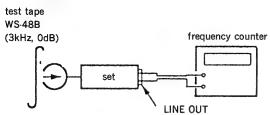




#### **Tape Speed Adjustment**

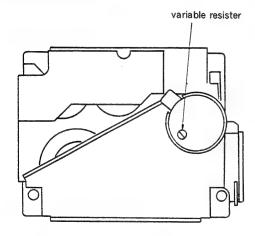
#### Procedure:

Mode: playback



- 1. Short the connector CNE702 (pins ① and ②). (test mode)
- 2. Set to FWD playback mode.
- 3. Adjust motor rear side (variable resister) so that the frequency counter reading becomes  $3,000\pm15$ Hz.
- 4. After adjustment, open the connector CNE702.

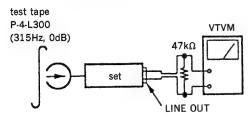
#### Adjustment Location: motor rear side (M1053)



#### Playback Level Adjustment

#### Procedure:

Mode: playback



Adjust RV121 (L-CH) and RV221 (R-CH) so that the reading on VTVM meets the adjustment limits below.

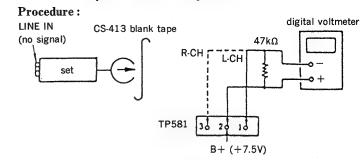
#### Adjustment Limits:

LINE OUT level: -8.2 to -7.2dB (0.301 to 0.338V) Level difference between channels: within 0.5dB

Check that the LINE OUT level does not change even if Playback and Stop operation is repeated several times.

Adjutment Location: MAIN board

#### **Bias Consumption Current Adjustment**



- 1. Set RV181 (L-CH) and RV281 (R-CH) to mechanical center and turn the set recording mode.
- Connect digital voltmeter as shown by the following table.
- 3. Adjust the following transformers for the minimum readings on the digital voltmeter

	Mesurement Point	Adjustment Part	Value
L-CH	① and ②, TP581	T181	less than
R-CH	③ and ② TP581	T281	200mV

Adjustment Location: MAIN board

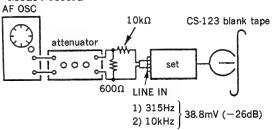
#### **Record Bias Adjustment**

#### Setting:

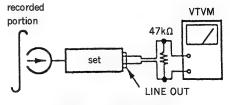
REC LEVEL control: Standard Record

#### Procedure:

- 1. Short the connector CNE702 (pins ① and ②). (test mode)
- 2. Mode: record



Mode: playback



- 4. Playback the signal recorded in step 1.
- 5. Confirm that the 10kHz playback output is 0±0.5dB: (TC-K611S/K711S) or 0±0.3dB: (TC-K707ES) relative to the 315Hz output. If necessary, adjust RV181 (L-CH) and RV281 (R-CH) for repeat the steps given above.
- 6. After adjustment, open the connector CNE702.

Adjustment Location: MAIN board

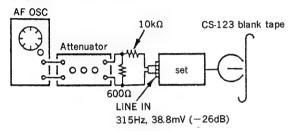
#### **Record Level Adjustment**

Setting:

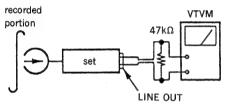
REC LEVEL control: Standard Record

#### Procedure:

- 1. Short the connector CNE702 (pins ① and ②). (test mode)
- 2. Mode: record



3. Mode: playback



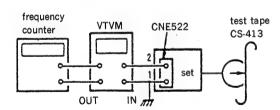
- 4. Playback the signal recorded in step 1.
- 5. Confirm that the signal level is within the adjustment limits below. If necessary, adjust RV141 (L-CH) and RV241 (R-CH) repeat the step 1 and 2.
- 6. After adjustment, open the connector CNE702.

Adjustment Limits: -26.5 to -25.5dB (36.7 to 41.1mV)

Adjustment Location: MAIN board

#### Erase Current Adjustment (TC-K707ES/K711S)

1. Mode: record



- Adjust RV504 so that the reading on VTVM is 110mV (erase current=110mA.)
- 3. And then confirm that the reading on the frequency counter is 160kHz.

#### Adjustment Limits:

Erase current: 105 to 110mA Frequency: 160±6kHz

Adjustment Location: MAIN board

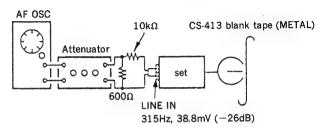
#### Record EQ (IV) Adjustment

Setting:

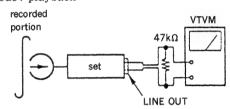
REC LEVEL control: Standard Record

#### Procedure:

- 1. Short the connector CNE702 (pins ① and ②). (test mode)
- 2. Mode: record



3. Mode: playback



- 4. Playback the signal recorded in step 1.
- Adjust RV142 (L-CH) or RV242 (R-CH) so that the reading on VTVM meets the within 1dB for difference between L-CH and R-CH.
- 6. Adjust RV508 so that the R-CH meet the specification.
- 7. After adjustment, open the connector CNE702.

#### Adjustment Limits:

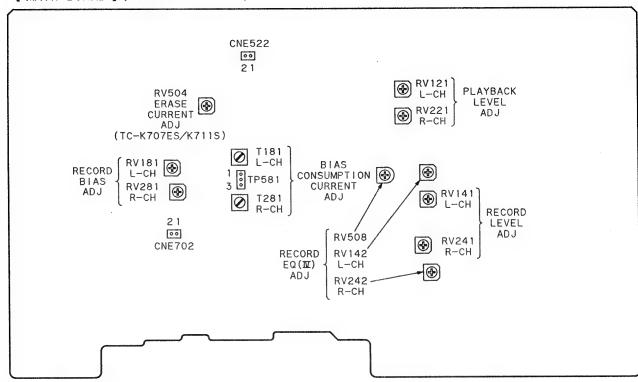
10kHz level difference against 315Hz reference.

0±0.3dB: (TC-K707ES) 0±0.5dB: (TC-K611S/K711S)

Adjustment Location: MAIN board

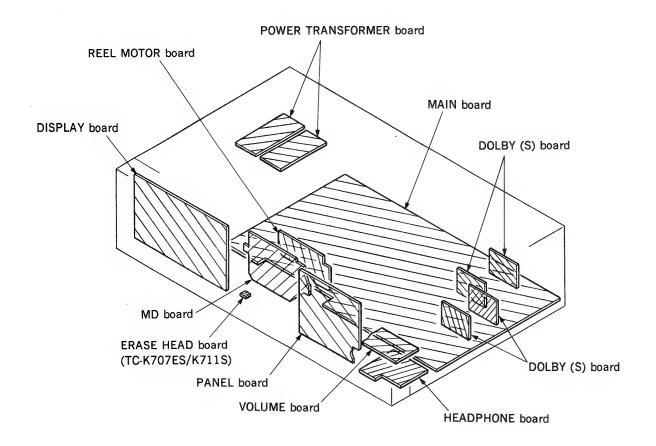
#### Adjustment Location:

#### [ MAIN BOARD ] (COMPONENT SIDE)



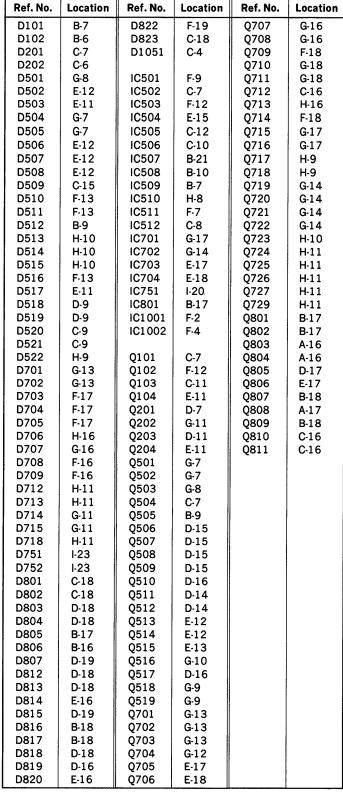
# SECTION 5 DIAGRAMS

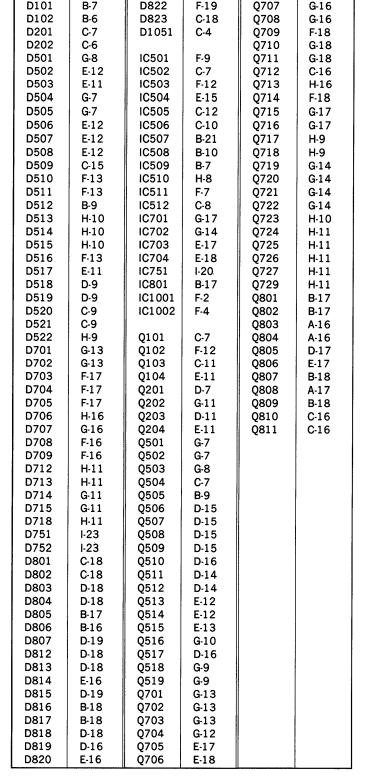
#### 5-1. CIRCUIT BOARDS LOCATION



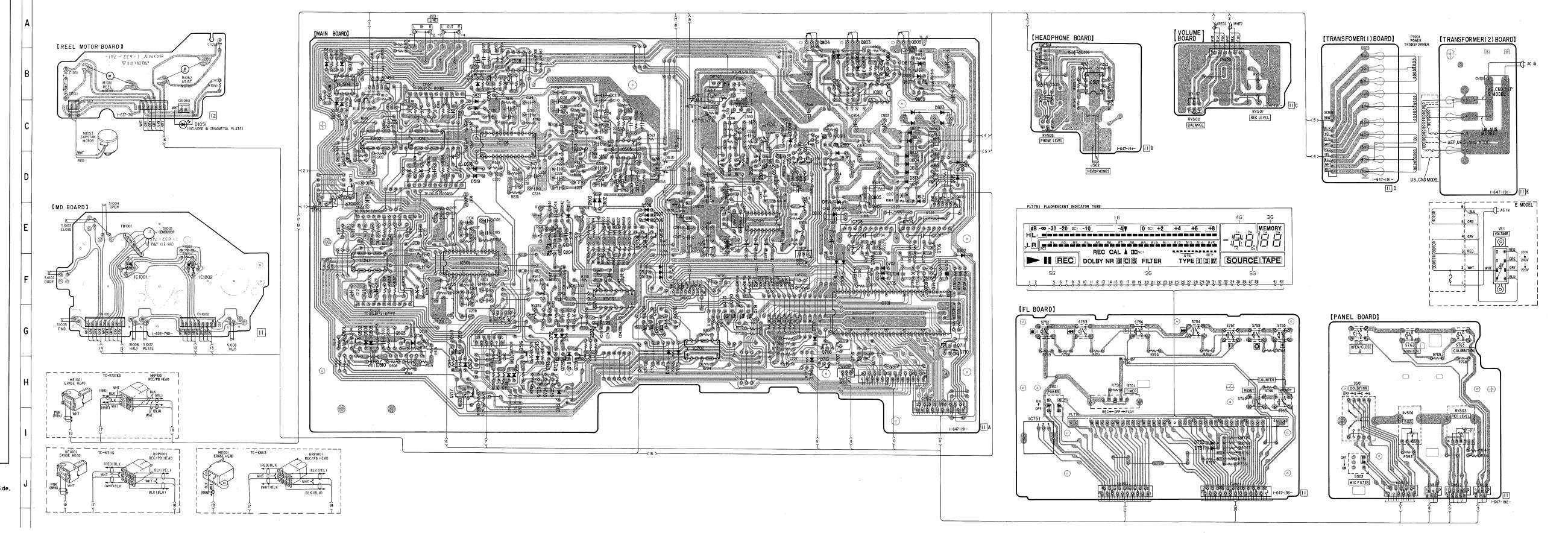
#### Semiconductor Location

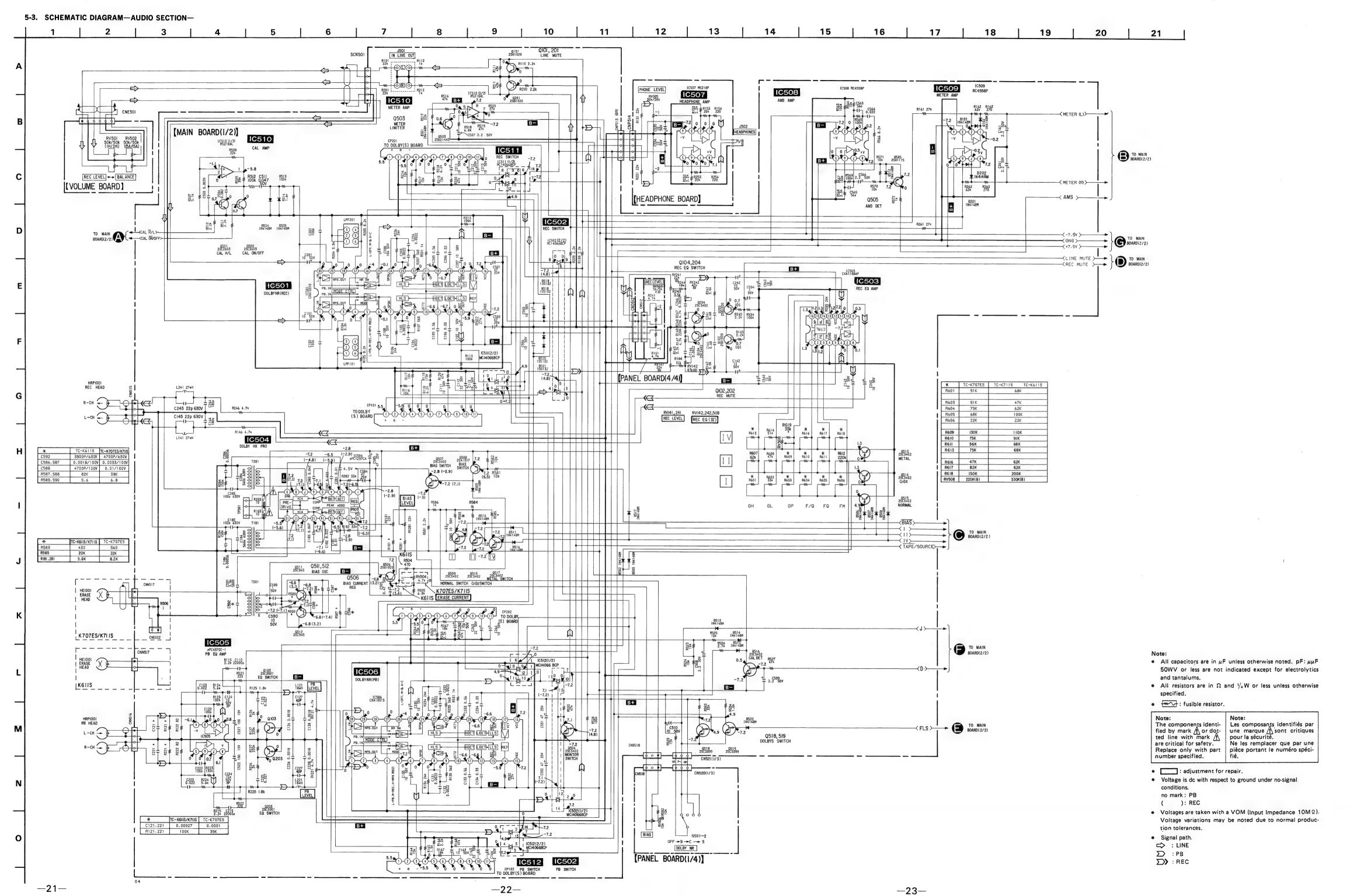
#### 5-2. PRINTED WIRING BOARDS—MAIN SECTION— • Refer to page 32 for Semiconductor Lead Layouts.

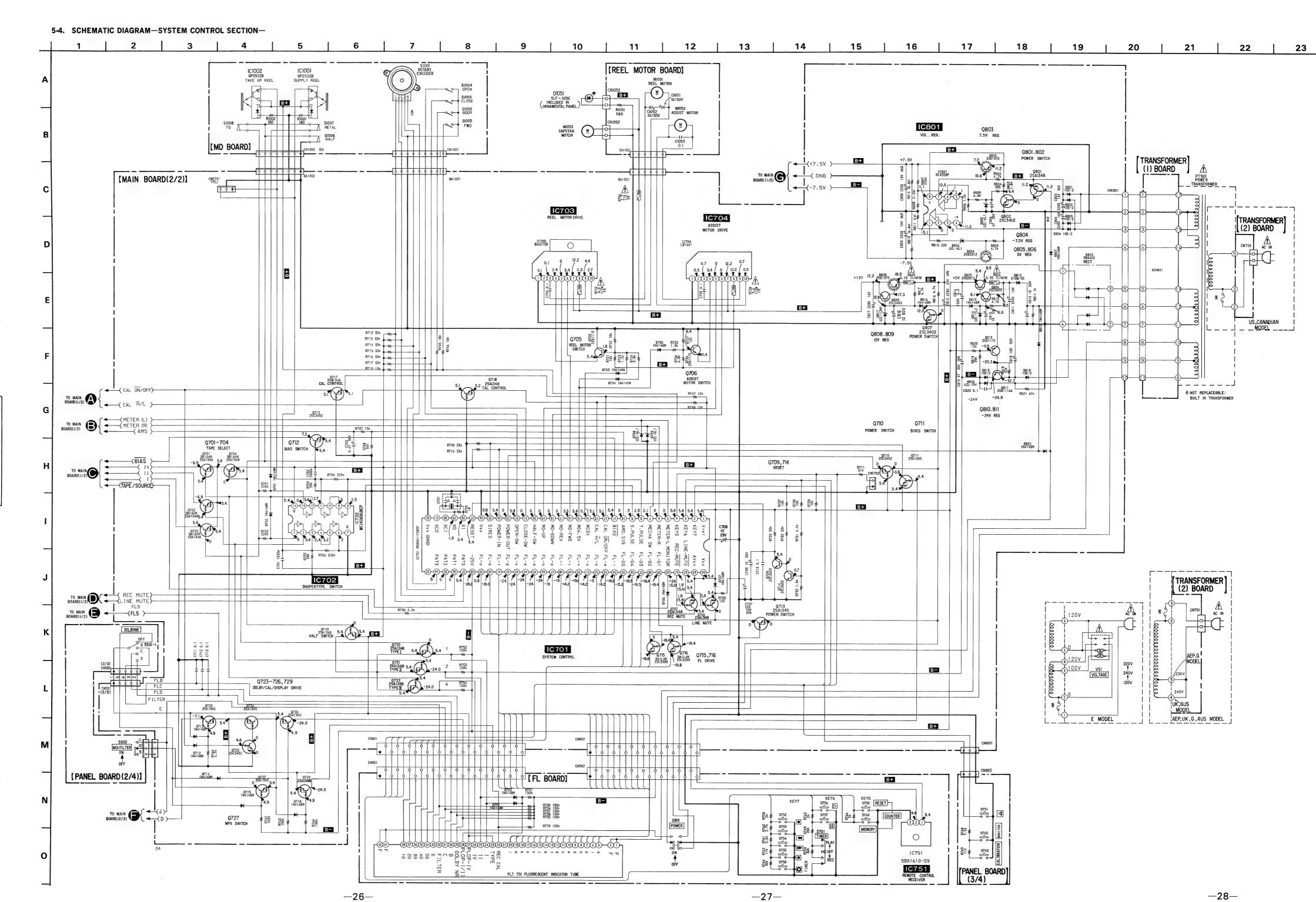




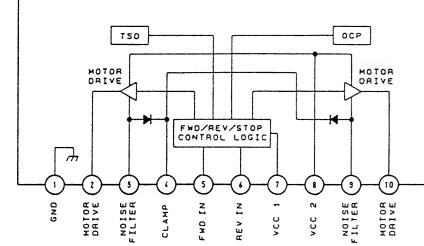
- o---: parts extracted from the component side.
- CND: Canadian model
- G : German model AUS : Australian model







• IC Block Diagram IC703 BA6219B IC704 LB1641



Mas

- All capacitors are in  $\mu F$  unless otherwise noted. pF:  $\mu \mu F$  50WV or less are not indicated except for electrolytics
- and tantalums. • All resistors are in  $\Omega$  and 1/4 W or less unless otherwise
- specified.

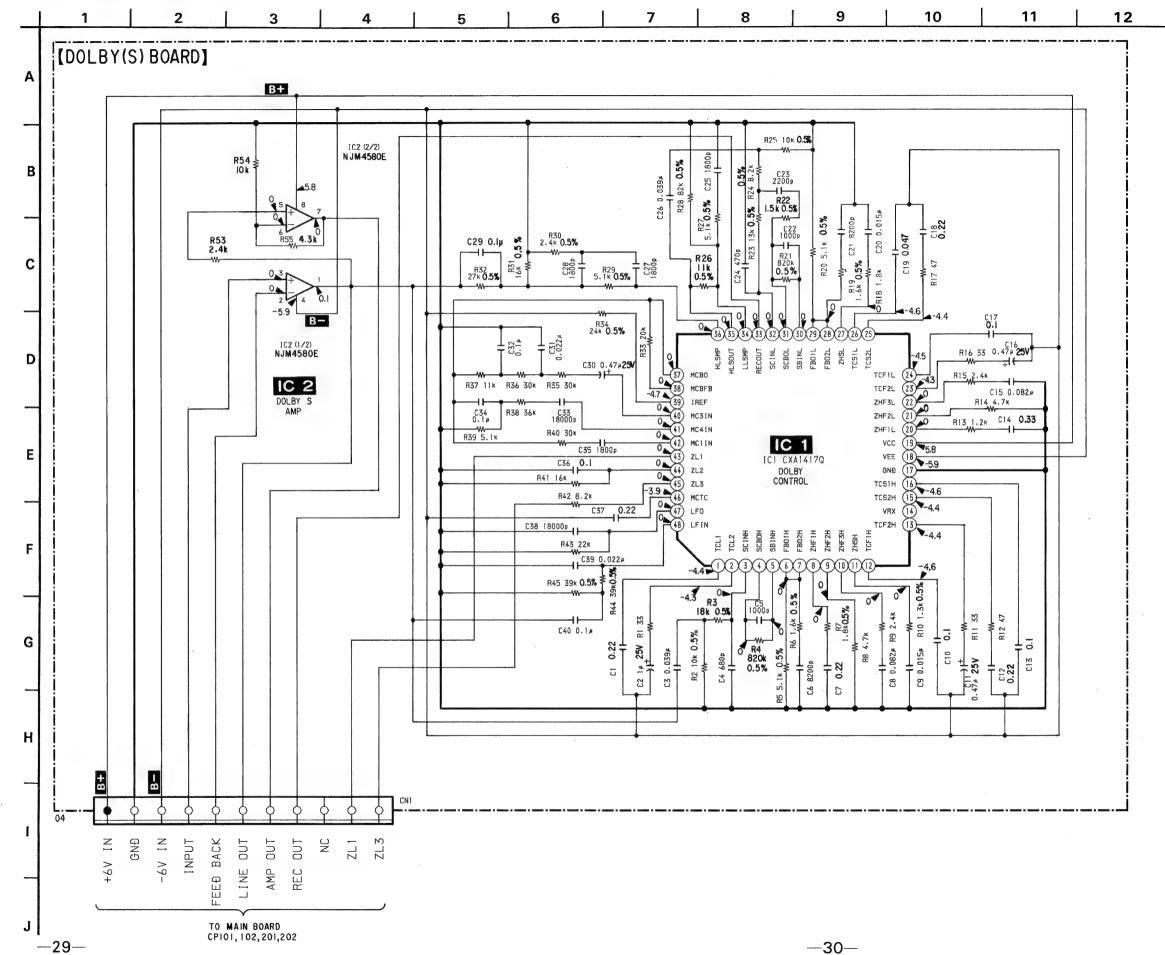
   △ : internal component.
- \(\triangle \) : internal componen
  \(\text{tusible resistor.}\)

Note:
The components identified by mark or dotted line with mark are critical for safety.
Replace only with part number specified.

Note:
Les composants identifiés par une marque sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

- Voltage is dc with respect to ground under no-signal conditions.
- no mark : PB ( ): REC
- Voltages are taken with a VOM (Input Impedance 10M  $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- G: German modelAUS: Australian model

#### 5-5. SCHEMATIC DIAGRAM—DOLBY S SECTION—



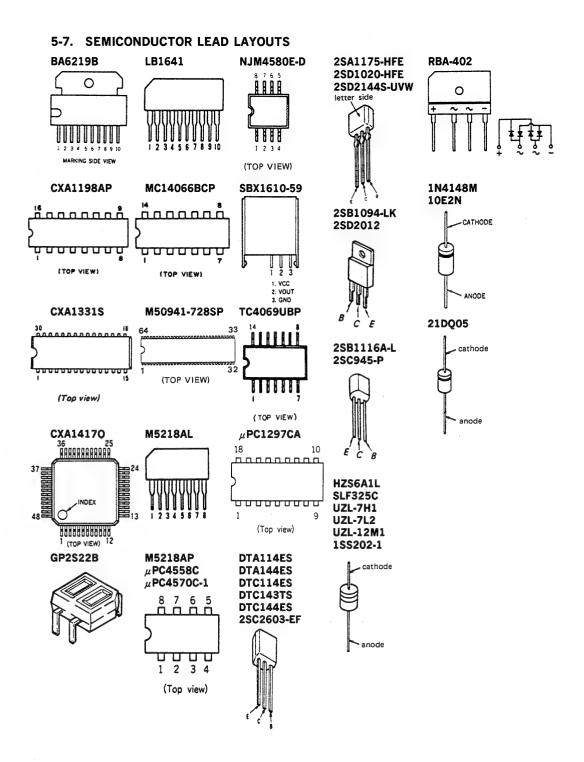
#### Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  ${}^t\!/_{\!4}\,W$  or less unless otherwise specified.
- Voltage is dc with respect to ground under no-signal conditions.
   no mark: PB
- Voltages are taken with a VOM (Input Impedance  $10M\,\Omega$ ). Voltage variations may be noted due to normal production tolerances.

#### 5-6. PRINTED WIRING BOARD—DOLBY S SECTION—

• Refer to page 32 for Semiconductor Lead Layouts.





#### **SECTION 6 EXPLODED VIEWS**

#### NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts Example:

KNOB, BALANCE (WHITE)... (RED)

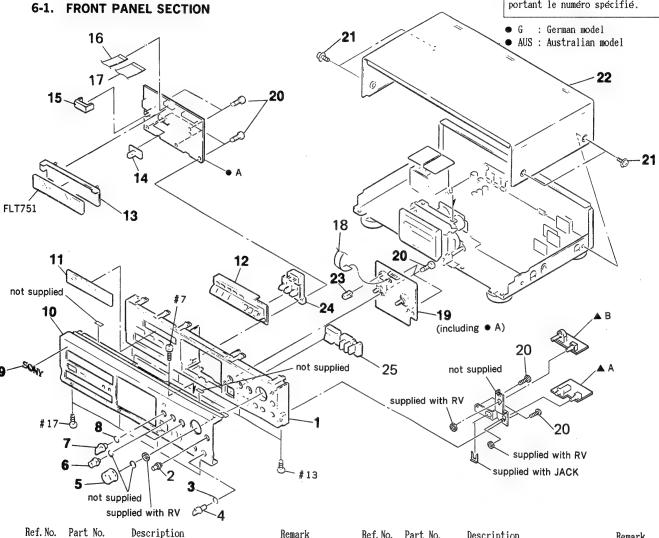
Parts Color Cabinet's Color

• Hardware (# mark) list is given in the last of this parts list.

The components identified by mark A or dotted line with mark.  $\Lambda$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque A sont critiques pour

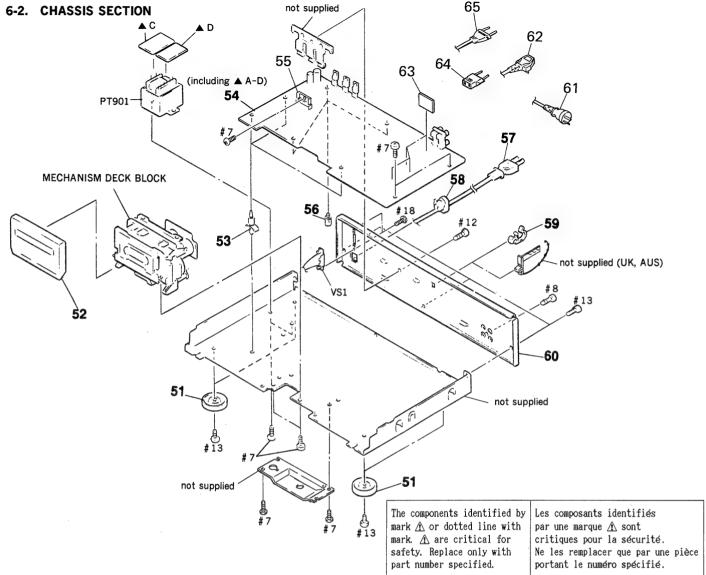
Ne les remplacer que par une pièce portant le numéro spécifié.



Remark

3-386-253-01	PANEL (BASE)	
3-370-003-01	KNOB (BAL)	
3-370-186-01	SPRING (SWPA), RING	
3-350-495-01	KNOB (VOL)	
3-367-438-11	KNOB (REC)	
X-3365-387-1	KNOB (BAL) ASSY (B)	
3-350-440-01	SPRING	
4-942-568-01	EMBLEM (NO. 5), SONY	
		ın)
3-386-251-41	PANEL. FRONT (K707ES:F)	
3-386-251-61	PANEL, FRONT (K611S:US. Canadian	)
		-,
3-386-243-11	WINDOW (M)	
	3-370-003-01 3-370-186-01 3-350-495-01 3-367-438-11 X-3365-387-1 4-908-097-21 3-350-440-01 4-942-568-01 3-386-251-31 3-386-251-51 3-386-251-61 3-386-251-61 3-386-251-81	3-386-253-01 PANEL (BASE) 3-370-003-01 KNOB (BAL) 3-370-186-01 SPRING (SWPA), RING 3-350-495-01 KNOB (VOL) 3-367-438-11 KNOB (REC)  X-3365-387-1 KNOB (BAL) ASSY (B) 4-908-097-21 KNOB 3-350-440-01 SPRING 4-942-568-01 EMBLEM (NO. 5), SONY 3-386-251-31 PANEL, FRONT (K707ES:US, Canadia) 3-386-251-41 PANEL, FRONT (K707ES:E) 3-386-251-51 PANEL, FRONT (K711S) 3-386-251-61 PANEL, FRONT (K611S:US, Canadian) 3-386-251-81 PANEL, FRONT (K707ES:AUS) 3-386-251-81 PANEL, FRONT (K707ES:AUS)

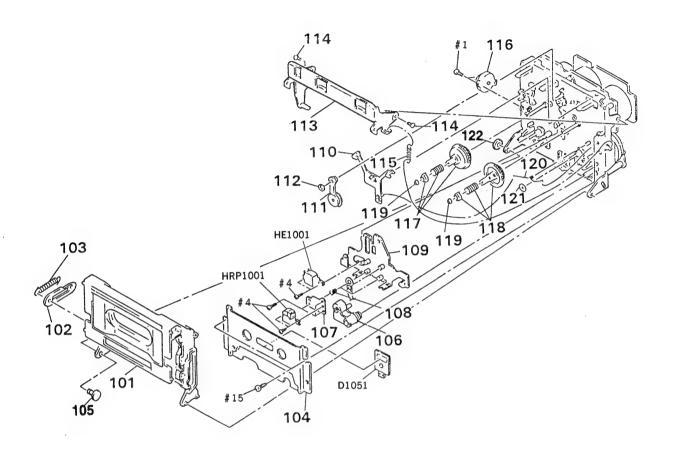
Ref. No.	Part No.	Description	Remark
12	3-386-247-01	BUTTON (FW)	
* 13	3-386-245-01	HOLDER (FL)	
14	4-922-518-01	KNOB (TIMER)	
15	3-354-932-01	BUTTON (POWER)	
16	1-690-893-11	WIRE (FLAT TYPE) (19 CORE)	
17	1-751-258-11	WIRE (FLAT TYPE) (25 CORE)	
18	1-534-517-00	WIRE, FLAT TYPE (11 CORE)	
* 19	A-2006-964-A	PANEL BOARD, COMPLETE	
20	4-951-620-01	SCREW (2.6X8), +BVTP	
21		SCREW (CASE) (M3X8)	
22	3-332-578-61	CASE	
23	3-380-952-01	BUTTON	
24	3-386-248-01	BUTTON (RE)	
25	3-386-249-01	BUTTON (EJ)	
FLT751	1-517-163-11	INDICATOR TUBE, FLUORESCENT	



Re	ef. No.	Part No.	Description	Remark
	51	4-943-148-32	F00T (F58175SW) (K611S:US, Cana	dian)
	51	4-943-148-42	FOOT (F58175SW)	,
			(K707ES/K611S: AEP, UK, G, AUS)	
	52	X-3366-167-1	LID ASSY, CASSETTE (K707ES:US,	Canadian)
	52		LID ASSY, CASSETTE (K711S)	
	52		LID ASSY, CASSETTE (K611S)	
	52	X-3366-170-1	LID ASSY, CASSETTE (K707ES:E, A	US)
*	53	3-346-265-11	HOLDER, PC BOARD	
*	54	A-2006-961-A	MAIN BOARD, COMPLETE (INCLUDIN	G DOLBY
			(S) BOARD) (K707ES:US, Canadian	)
*	54	A-2006-962-A	MAIN BOARD, COMPLETE (INCLUDIN	G DOLBY
			(S) BOARD) (K711S)	
*	54	A-2006-963-A	MAIN BOARD, COMPLETE (INCLUDIN	G DOLBY
			(S) BOARD) (K611S:US, Canadian,	AEP, G)
*	54	A-2007-037-A	MAIN BOARD, COMPLETE (INCLUDIN	G DOLBY
			(S) BOARD) (K707ES:AUS)	
*	54	A-2007-038-A	MAIN BOARD, COMPLETE (INCLUDING	G DOLBY
			(S) BOARD) (K611S:UK, AUS)	
*	54	A-2007-045-A	MAIN BOARD, COMPLETE (INCLUDING	G DOLBY
		0 050 005 04	(S) BOARD) (K707ES:E)	
	55	3-356-925-01		
*	56	3-669-610-00	SPACER	

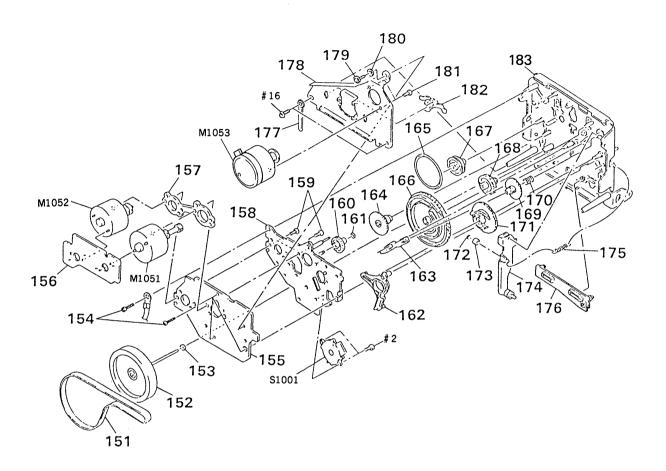
Ref. No.	Part No.	Description Remark	
<b>1</b> √57	1-551-188-XX	CORD, POWER (E)	
<b>1</b> √57	1-558-945-21	CORD, POWER (POLAR. SPT-1) (US, Canadian)	
		BUSHING (2104), CORD (AEP, UK, G, AUS)	
		BUSHING (S) (4516), CORD (US, Canadian, E	)
		FOOK (EXCEPT K707ES:AUS, K611S:UK, AUS)	•
* 60	3-386-254-01	PANEL, BACK (K707ES:US, Canadian)	
		PANEL, BACK (K707ES:E)	
		PANEL, BACK (K707ES: AUS)	
		PANEL, BACK (K711S)	
		PANEL, BACK (K611S:US, Canadian)	
* 60	3-386-255-11	PANEL, BACK (K611S:AEP, G)	
		PANEL, BACK (K611S:UK, AUS)	
		CORD, POWER (AUS)	
		CORD, POWER (UK)	
		DOLBY (S) BOARD, COMPLETE	
<b>/</b> \64	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
		CORD, POWER (AEP, G)	
		TRANSFORMER, POWER (US, Canadian)	
		TRANSFORMER, POWER (AEP, UK, G, AUS)	
		TRANSFORMER, POWER (E)	
∆VS1	1-692-155-11	SELECTOR, POWER VOLTAGE (VOLTAGE) (E)	

# 6-3. MECHANISM SECTION 1 (TCM-200V15: TC-K611S)



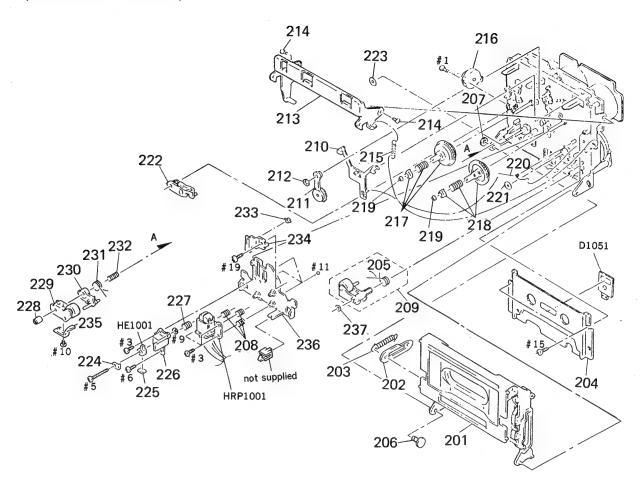
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	X-3365-299-1	HOLDER (CD-C) ASSY, CASSETTE		114	3-356-601-11	SCREW, STEP	
* 102	3-356-717-01	LEVER (JOINT)		115	3-356-625-01	SPRING, TENSION	
103	3-356-626-01	SPRING, TENSION		116	3-712-786-01	DAMPER, OIL	
104	X-3356-613-1	PLATE ASSY, ORNAMENTAL		117	X-3356-628-1	GEAR (S) ASSY	
105		SHAFT (L) (CASSETTE HOLDER)		118	X-3356-627-1	GEAR (T) ASSY	
106	X-3356-649-1	LEVER (PINCH LEVER T) ASSY		119	3-362-308-01	CAP (REEL)	
* 107	3-356-742-01	BRACKET (GUIDE R)		120	3-356-619-01	SPRING (B), TORSION	
108		SPRING (RPH), COMPRESSION		121	3-356-713-01	WASHER	
109		SLIDER (HEAD CHASSIS V2) ASSY		122	3-558-708-21	WASHER, STOPPER	
110		SLIDER (BRAKE)				DIODE SLF325C	
111	X-3356-641-1	LEVER (FR2) ASSY		HE1001	1-543-673-11	HEAD, MAGNETIC (ERASE)	
112		WASHER (1.5), STOPPER				HEAD, MAGNETIC (RECORD/PLAYBA	(CK)
* 113		LEVER (LIFTER) ASSY		1114 100.	11 010 100 11	in the state of th	,

### 6-4. MECHANISM SECTION 2 (TCM-200V15: TC-K611S)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	3-356-744-01	BELT (CAPSTAN V)		170	3-356-605-01	SPRING, COMPRESSION	
152		FLYWHEEL (R FWD) ASSY		171		GEAR (LOADING CAM)	
153		WASHER (CAPSTAN)		172		WASHER, STOPPER	
154		SCREW (BTP 2X18)		173		ROLLER (LOADING)	
* 155	1-632-740-11	,		* 174		LEVER (LOADING) ASSY	
* 156	1-632-741-11	REEL MOTOR BOARD		175	3-372-919-01	SPRING, TENSION	
* 157	3-356-628-01	SPACER (MOTOR)		176	3-356-653-01	SLIDER (PAUSE)	
* 158	X-3356-602-1	BRACKET (MOTOR R) ASSY		177	3-703-150-11	STOPPER, WIRING	
159	3-363-804-01	SCREW (+P 2.6X6.5)		* 178	3-356-629-01	BRACKET (THRUST RETAINER R)	
160	3-356-702-01	GEAR (COMMUNICATION B)		179	3-356-707-01	SCREW (+PTPWH 2X25)	
161	3-669-465-00	WASHER (1.5), STOPPER		* 180	3-356-718-01	SPACER (THRUST RETAINER R)	
162	3-356-613-01	LEVER (MODE)		181	4-885-599-00	SCREW, FITTING, REINFORCEMENT	
163	3-356-617-01	LEVER (SELECTION)		182		RETAINER, THRUST, CAPSTAN	
164	3-356-606-01	GEAR (MODE)		183		CHASSIS (V1) COMPLETE ASSY, MECH	I
165	3-356-603-01	BELT (MODE)		M1051		MOTOR (REEL R) ASSY	•
166	3-356-747-01	GEAR (MODE CAM C)		M1052	X-3356-604-1	MOTOR (ASSIST) ASSY	
167	3-356-607-01	PULLEY (MODE)				MOTOR (CAPSTAN V1) ASSY	
168		GEAR (COMMUNICATION C)				ENCODER, ROTARY	
169		GEAR (LOADING)		21301	2 100 200 11	2 oz 2.ig itolilit	

#### 6-5. MECHANISM SECTION 3 (TCM-200V16: TC-K707ES) (TCM-200V17: TC-K711S)

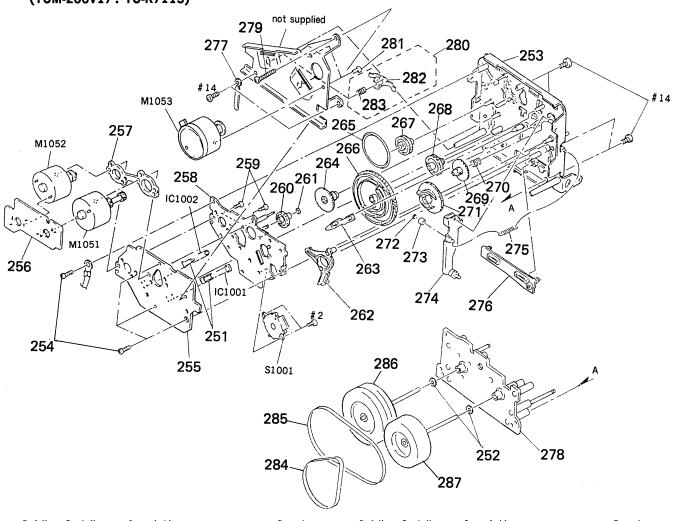


Ref. No.	Part No.	Description	Remark
* 202 203	3-356-717-01 3-356-626-01 X-3356-613-1	HOLDER (CD-C) ASSY, CASSETTE LEVER (JOINT) SPRING, TENSION PLATE ASSY, ORNAMENTAL SPRING (PINCH LEVER T), TORSION	
	3-558-708-21 3-356-659-01 X-3356-620-1	SHAFT (L) (CASSETTE HOLDER) WASHER, STOPPER (K711S) SPRING (RPH), COMPRESSION LEVER (PINCH LEVER T) ASSY SLIDER (BRAKE)	
212 * 213 214	3-669-465-11 X-3356-608-1 3-356-601-11	LEVER (FR2) ASSY WASHER (1.5), STOPPER LEVER (LIFTER) ASSY SCREW, STEP SPRING, TENSION	
217 218	X-3356-627-1 3-362-308-01	GEAR (S) ASSY GEAR (T) ASSY	
221	3-332-763-01	RING, OIL RESERVOIR	

Ref. No.	Part No.	Description	Remark
222	X-3356-623-1	LEVER (BT) ASSY	-
223	3-356-713-01	WASHER	
224	3-318-433-01	SPRING	
* 225	1-608-268-00	ERASE HEAD BOARD	
* 226	3-576-977-00	BRACKET, E. HEAD	
227	3-564-121-00	SPRING, COMPRESSION	
228	3-356-652-01	NUT (PINCH LEVER S)	
229	X-3356-621-1	LEVER (PINCH LEVER S) ASSY	
230	3-356-660-01	LEVER (PS)	
231	3-356-661-01	SPRING (PINCH LEVER S), TORSION	
232	3-356-657-01	SPRING (PS), COMPRESSION	
233	3-367-775-01	ROLLER (HEAD CHASSIS)	
234	3-356-656-11	SPRING (HEAD PC BOARD), LEAF	
235	3-389-445-01	GUIDE (SL), TAPE	
* 236	X-3362-861-1	SLIDER (HEAD CHASSIS V4) ASSY	
237	3-669-596-00	WASHER (2.3), STOPPER	
D1051	8-719-980-85	DIODE SLF325C	
HE1001	1-543-836-11	HEAD, MAGNETIC (ERASE)	
HRP100	11-543-834-11	HEAD, MAGNETIC (REC/PB) (K711S)	1
HRP100	11-543-835-11	HEAD, MAGNETIC (REC PB) (K707ES	3)

# 6-6. MECHANISM SECTION 4 (TCM-200V16: TC-K707ES)

(TCM-200V16: TC-K707ES)



Ref No	Part No.	Description	Remark	Ref No	Part No.	Description	Remark
			<del></del>				
251		HOLDER (SENSOR)		273		ROLLER (LOADING)	
252		WASHER (CAPSTAN)				LEVER (LOADING) ASSY	
* 253		CHASSIS (V4) ASSY, MECHANICAL		275		SPRING, TENSION	
254		SCREW (BTP 2X18)		276		SLIDER (PAUSE)	
* 255	1-632-740-11	MD BOARD		277	3-703-150-11	STOPPER, WIRING	
* 256	1-632-741-11	REEL MOTOR BOARD		* 278	X-3362-865-1	BRACKET (CAPSTAN BASE) ASSY	
* 257	3-356-628-01	SPACER (MOTOR)		279	3-356-707-01	SCREW (+PTPWH 2X25)	
* 258	X-3356-616-1	BRACKET (MOTOR D) ASSY		280	X-3365-071-1	RETAINER (V4) ASSY, THRUST	
259	3-363-804-01	SCREW (+P 2.6X6.5)		281	4-885-599-00	SCREW, FITTING, REINFORCEMENT	
260	3-356-702-01	GEAR (COMMUNICATION B)		282	3-575-321-00	RETAINER, THRUST, CAPSTAN	
261	3-669-465-00	WASHER (1.5), STOPPER		283	3-379-310-01	SPRING, COMPRESSION	
262	3-356-613-01	LEVER (MODE)		284	3-367-774-01	BELT (CAPSTAN V4)	
263	3-356-617-01	LEVER (SELECTION)		285	3-364-600-01	BELT (CAPSTAN)	
264	3-356-606-01	GEAR (MODE)		286	X-3362-863-1	FLYWHEEL (VT) ASSY	
265	3-356-603-01	BELT (MODE)		287	X-3362-864-1	FLYWHEEL (VS) ASSY	
266	3-356-747-01	GEAR (MODE CAM C)		IC1001	8-749-920-97	DIODE GP2SSSB	
267		PULLEY (MODE)				DIODE GP2S22B	
268		GEAR (COMMUNICATION C)				MOTOR (REEL R) ASSY	
269		GEAR (LOADING)				MOTOR (ASSIST) ASSY	
270		SPRING, COMPRESSION				MOTOR (CAPSTAN R2) ASSY	
271 272		GEAR (LOADING CAM) WASHER, STOPPER		S1001	1-466-238-11	ENCODER, ROTARY	

# SECTION 7 ELECTRICAL PARTS LIST

DOLBY (S)

#### NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
   All resistors are in ohms.
   METAL:Metal-film resistor.
   METAL OXIDE: Metal oxide-film resistor.
   F:nonflammable
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
   In each case, u:μ, for example:
   uA..: μA.. uPA..: μPA..
   uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- uF: μF ● COILS uH: μH

CAPACITORS

When indicating parts by reference number, please include the board.

The components identified by mark A or dotted line with mark. A are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque  $\triangle$  sont critiques pour la sécurité.

Ne les remplacer que par une pièce portant le numéro spécifié.

G : German modelAUS : Australian model

Ref. No.	Part No.	Description		Re	emark	Ref. No.	Part No.	Descr	iption			Ren	nark
*	A-2006-954-A	DOLBY (S) BOAR	D, COMPLETE			C36	- <del></del> 1-165-319-11	CERAM	IC CHIP	0. 1uF	,		507
		******	******			C37	1-164-222-11	CERAM	IC CHIP	0. 22u	ıF		25\
						C38	1-163-024-00			0.018	BuF	10%	501
		< CAPACITOR >				C39	1-104-555-11	FILM	CHIP	0. 022	luF	5%	161
						C40	1-104-563-11	FILM	CHIP	0. 1uF	,	5%	161
C1		CERAMIC CHIP	0. 22uF		25V								
C2		TANTALUM CHIP	1uF	20%	20V			< CON	NECTOR >				
C3	1-104-558-91		0. 039uF	5%	16V								
C4		CERAMIC CHIP	680PF	10%	50V	* CN1	1-537-473-11	TERMI	NAL (LEAD	PIN)			
C5.	1-163-009-11	CERAMIC CHIP	0. 001uF	10%	50V								
CC	1 104 717 11	CEDANIC CHID	J., 0000	Γeν	E017			< IC	>				
C6		CERAMIC CHIP	0. 0082uF	5%	50V	104		7.0	07144450				
C7	1-164-222-11		0. 22uF	E0.	25V	IC1	8-752-056-51		CXA1417Q				
C8	1-104-562-11		0. 082uF	5% 5%	16V	IC2	8-759-711-85	10	NJM4580E-D				
C9	1-104-553-11		0. 015uF	5%	16V			/ DEG	TOMOD \				
C10	1-165-319-11	CERAMIC CHIP	0. 1uF		50V			< RES	ISTOR >				
C11	1-135-145-11	TANTALUM CHIP	0. 47uF	10%	35V	R1	1-216-013-00	METAL.	CHIP	33	5%	1/10W	
C12	1-164-222-11		0. 22uF		25V	R2	1-216-675-11			10K		1/10W	
C13	1-165-319-11		0. 1uF		50V	R3	1-216-681-11			18K		1/10W	
C14	1-162-568-11		0. 33uF	10%	16V	R4	1-218-774-11			820K		1/10W	
C15	1-104-562-11		0. 082uF	5%	16V	R5	1-216-668-11				0.5%		
C16	1-135-145-11	TANTALUM CHIP	0. 47uF	10%	35V	R6	1-216-656-11	METAI	CHIP	1 6K	0. 5%	1/10W	
C17	1-165-319-11		0. 1uF	10%	50V	R7	1-216-657-11				0.5%	1/10W	
C18	1-164-222-11		0. 22uF		25V	R8	1-216-065-00			4. 7K		1/10W	
C19	1-163-035-00		0. 047uF		50V	R9	1-216-058-00			2. 4K		1/10W	
C20	1-104-553-11		0. 015uF	5%	16V	R10	1-216-654-11				0.5%		
C21	1-164-717-11	CEDAMIC CHID	0. 0082uF	5%	50V	R11	1-216-013-00	METAI	CHID	33	EW	1 /100	
C22	1-163-009-11		0. 000zur 0. 001uF	10%	50V 50V	R11	1-216-013-00				5% 5%	1/10W	
C23	1-164-161-11		0. 001ur 0. 0022uF	10%	100V	R13	1-216-017-00			47		1/10W	
C24	1-163-005-11		470PF	10%	50V	R14	1-216-051-00			1. 2K		1/10W	
C25	1-163-012-00		0.0018uF	10%	50V	R15	1-216-055-00			4. 7K 2. 4K		1/10W 1/10W	
-	1 100 012 00	obtained office	0.001041	10%	001	nio nio	1 210 000 00	IIIL IIIL	GUILL	L. 111	0.00	1/10#	
C26	1-104-558-91	FILM CHIP	0. 039uF	5%	16V	R16	1-216-013-00	METAL	CHIP	33	5%	1/10W	
C27	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V	R17	1-216-017-00	METAL	CHIP	47	5%	1/10W	
C28	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V	R18	1-216-055-00	METAL	CHIP	1.8K	5%	1/10W	
C29	1-104-563-11	FILM CHIP	0. 1uF	5%	16V	R19	1-216-656-11	METAL	CHIP	1.6K	0.5%	1/10W	
C30	1-135-145-11	TANTALUM CHIP	0. 47uF	10%	35V	R20	1-216-668-11	METAL	CHIP	5. 1K	0.5%	1/10W	
C31	1-104-555-11	FILM CHIP	0. 022uF	5%	16V	R21	1-218-774-11	METAL	CHIP	820K	0. 50%	1/10W	
C32	1-104-563-11	FILM CHIP	0. 1uF	5%	16V	R22	1-216-655-11				0. 5%		
C33	1-163-024-00	CERAMIC CHIP	0. 018uF	10%	50V	R23	1-216-678-11			13K		1/10W	
C34	1-104-563-11	FILM CHIP	0. 1uF	5%	16V	R24	1-216-673-11			8. 2K	0.5%		
C35	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V	R25	1-216-675-11	METAL	CHIP	10K	0.5%		

# DOLBY (S) MAIN

Ref. No.	Part No.	Description	ì		Re	mark	Ref. No.	Part No.	Description		Remark	
R26	1-216-676-11	METAL CHIP	— 11K	0. 5%	1/10	1	C111	1-124-907-11	ELECT	10uF	20%	50V
R27	1-216-668-11			0.5%		1	C112	1-124-916-11		22uF	20%	63V
R28	1-216-697-11			0.5%			C113	1-124-907-11		10uF	20%	50V
R29	1-216-668-11			0.5%			C121	1-110-335-11		100PF	5%	50V
R30	1-216-660-11			0. 5%		1	VILI	1 110 333 11	(K707ES)	10011	0/0	301
1100	1 210 000 11	MEIAL VIII	2. 411	U. JA	1/101		C121	1-110-340-11		270PF	5%	50V
R31	1-216-680-11	METAL CHID	16K	0 59	1/10		0121	1 110 340 11	(K711S, K611S)	27011	J/g	JUY
R32	1-216-685-11		27K		1/10				(1113, 10113)			
R33	1-216-080-00		27K 20K	5%	1/10	1	0122	1_169_999_91	CEDAMIC	100DF	1.00/	50V
R34	1-216-684-11				•	1	C122	1-162-282-31		100PF	10%	
R35	1-216-084-11		24K 30K	5%	1/10		C123	1-130-487-00		0. 022uF	5%	50V
noo	1-210-004-00	METAL UNIP	30 <i>V</i>	3%	1/10		C124	1-124-657-00		10uF	20%	50V
Doc	1 210 004 00	METAL CHID	201/	EW	1 /100	.	C125	1-130-488-00		0. 027uF	5% =~	50V
R36	1-216-084-00		30K	5% 5%	1/10		C126	1-130-474-00	MILAR	0.0018uF	5%	50V
R37	1-216-074-00		11K	5%	1/10	1	0105	1 100 501 11	GEDANIG	4000	E0v	E017
R38	1-216-086-00			5%	1/10	i	C127	1-102-521-11		43PF	5%	50V
R39	1-216-066-00		5. 1K		1/10		C128	1-130-474-00		0.0018uF	5%	50V
R40	1-216-084-00	METAL CHIP	30K	5%	1/10W	'	C131	1-130-475-00		0. 0022uF	5%	50V
D44	1 010 070 00	MEMAL CLASS	107	-o	4 /4 00	,	C132	1-130-475-00		0. 0022uF	5%	50V
R41	1-216-078-00			5%	1/10		C133	1-136-174-00	rilm	0.56uF	5%	50V
R42	1-216-071-00		8. 2K		1/10		0104	1 100 171 00	DIIM	0.00 5	<b>E0</b> /	F017
R43	1-216-081-00		22K	5%	1/10		C134	1-136-171-00		0. 33uF	5%	50V
R44	1-216-689-11		39K		1/10		C135	1-124-657-00		10uF	20%	50V
R45	1-216-689-11	MCIAL CHIP	39K	U. 5%	1/10W		C141	1-136-175-00		0. 68uF	5%	50V
חדים	1 010 000 00	MEMAL CLASS	0.417	F0/	4 /4 00		C142	1-126-059-11		10uF	20%	50V
R53	1-216-058-00				1/10		C143	1-126-059-11	ELEUT	10uF	20%	50V
R54	1-216-675-11			0.5%			04.44	4 440 000 54	157 LD	40000	<b>50</b> /	FOTT
R55	1-216-666-11			0.5%		1	C144	1-110-338-51		180PF	5%	50V
******	******	******	*******	*****	*****	****	C145	1-136-935-11		22PF	5%	630V
		W. TV. DO. DD.	GOVERN FREE	/******			C146	1-130-475-00		0. 0022uF	5%	50V
*	A-2006-961-A			•		OLBA	C161	1-124-925-11		2. 2uF	20%	100V
		(S) BOARD)				a. n	C162	1-124-907-11	ELECT	10uF	20%	50V
*	A-2006-962-A			(INCLU	DING D	OFRA						
		(S) BOARD)		<b>,</b>			C163	1-124-916-11		22uF	20%	63V
*	A-2006-963-A						C164	1-124-907-11		10uF	20%	50V
		(S) BOARD)					C181	1-136-153-00		0. 01uF	5%	50V
*	A-2007-037-A				DING D	OLBY	C182	1-136-157-00		0. 022uF	5%	50V
		(S) BOARD)	•				C183	1-136-161-00	FILM	0.047uF	5%	50V
*	A-2007-038-A				DING D	OLBY						
		(S) BOARD)					C184	1-136-803-11		560PF	5%	630V
*	A-2007-045-A			(INCLU	DING D	OLBY	C185	1-136-433-11		100PF	5%	630V
		(S) BOARD)	(K707ES:E)				C186	1-130-468-00		560PF	5%	50V
		*****	*****				C201	1-126-059-11		10uF	20%	50V
							C202	1-162-282-31	CERAMIC	100PF	10%	50V
*	3-356-925-01											
	7-685-871-01	SCREW +BVT7	[ 3X6 (S)				C203	1-130-475-00		0. 0022uF	5%	50V
							C204	1-130-475-00		0.0022uF	5%	50V
		< CAPACITOR	<b>{</b> }				C205	1-136-174-00	FILM	0.56uF	5%	50V
							C206	1-136-171-00		0. 33uF	5%	50V
C101	1-126-059-11		10uF		20%	50V	C207	1-126-059-11	ELECT	10uF	20%	50V
C102	1-162-282-31		100PF		10%	50V						
C103	1-130-475-00		0.002		5%	50V	C208	1-124-657-00		10uF	20%	50V
C104	1-130-475-00		0.002		5%	50V	C210	1-161-494-00		0. 022uF		25V
C105	1-136-174-00	FILM	0. 56u	F	5%	50V	C211	1-124-907-11		10uF	20%	50V
							C212	1-124-916-11		22uF	20%	63V
C106	1-136-171-00		0. 33u	F	5%	50V	C213	1-124-907-11	ELECT	10uF	20%	50V
C107	1-126-059-11		10uF		20%	50V						
~	1-124-657-00	ELECT	10uF		20%	50V	C221	1-110-335-11	MYLAR	100PF	5%	50V
C108 C110	1-161-494-00											

Ref. No.	Part No.	Description		Ren	nark	Ref. No.	Part No.	Description		Ren	nark
C221	1-110-340-11	MYLAR	270PF	5%	50V	C564	1-136-157-00	FILM	0. 022uF	5%	50V
		(K711S, K611S)				C565	1-162-217-31	CERAMIC	56PF	5%	50V
C222	1-162-282-31		100PF	10%	50V	C566	1-124-925-11	ELECT	2. 2uF	20%	100V
C223	1-130-487-00	MYLAR	0. 022uF	5%	50V	C583	1-124-907-11	ELECT	10uF	20%	50V
C224	1-124-657-00		10uF	20%	50V	C584	1-124-477-11		47uF	20%	25V
C225	1-130-488-00		0. 027uF	5%	507	0001	1 101 111 11	22201	1.4.	20.0	201
0220	1 100 100 00	MILLIM	0.02701	070	001	C585	1-124-477-11	FLECT	47uF	20%	25V
C226	1-130-474-00	MVI AR	0. 0018uF	5%	50V	C586	1-136-593-11		0. 0033uF	5%	100V
C227	1-102-521-11		43PF	5%	50V	0000	1 100 030 11	(K707ES, K711S)	0. 0000ai	0.0	1001
C228	1-130-474-00		0. 0018uF	5%	50V	C586	1-136-253-11		0. 0018uF	5%	100V
C231	1-130-474-00		0. 0013uF	5%	50V	0300	1 100 200 11	(K611S)	0. 001 <b>0</b> 01	0.0	1001
C232	1-130-475-00		0. 0022uF	5%	50V	C587	1-136-593-11	, ,	0. 0033uF	5%	100V
0232	1 130 473 00	MILMI	0. 0022di	3/0	301	0307	1 100 000 11	(K707ES, K711S)	0.005541	0.00	1001
C233	1-136-174-00	FILM	0. 56uF	5%	50V	C587	1-136-253-11		0. 0018uF	5%	100V
C234	1-136-171-00		0. 33uF	5%	50V	0007	1 100 200 11	(K611S)	0.001041	O.W	1001
C235	1-124-657-00		10uF	20%	50V			(ROLLD)			
C241	1-136-175-00		0. 68uF	5%	50V	C588	1-130-955-00	FILM	0. 01uF	5%	100V
C242	1-126-059-11		10uF	20%	50V	0300	1 130 333 00	(K707ES, K711S)	0. 01ui	0.40	1001
02-12	1 120 003 11	LBLUI	1001	20%	001	C588	1-136-233-11		0.0047uF	5%	100V
C243	1-126-059-11	ri rot	10uF	20%	50V	0000	1 100 200 11	(K611S)	0.004741	O/U	1001
C244	1-110-338-51		180PF	5%	50V	C589	1-136-177-00		1uF	5%	50V
C245	1-136-935-11		22PF	5%	630V	C590	1-124-907-11		10uF	20%	50V
C246	1-130-475-00		0. 0022uF	5%	50V	C591	1-107-045-00		3. 9PF	20%	500V
C261	1-124-925-11		2. 2uF	20%	100V	0331	1 107 043 00	MICA	J. JFT		3004
0201	1-124-325-11	EPECI	2. Zur	20/0	1004	C592	1-136-559-11	FILM	0. 0047uF	5%	630V
C262	1-124-907-11	EI ECT	10uF	20%	50V	0332	1-130-339-11	(K707ES, K711S)	0. 0047ur	3/0	0301
C263	1-124-916-11		22uF	20%	63V	C592	1-136-558-11		0. 0039uF	5%	630V
C264	1-124-910-11		10uF	20%	50V	0332	1 130 330 11	(K611S)	0. 0033ur	J/0	0304
C281	1-136-153-00		0. 01uF	5%	50V	C593	1-124-907-11	, ,	10uF	20%	50V
C282	1-136-157-00		0. 01ur 0. 022uF	5%	50V	C594	1-124-907-11		10uF	20%	50V
0202	1-130-137-00	LIEM	0. 022ur	3%	201	C701			0. 001uF	10%	50V
C283	1 100 101 00	Elim	0.04717	EW	50V	0701	1-162-294-31	CERAMIC	o. ootur	10%	307
	1-136-161-00		0. 047uF	5% = 0	I .	0700	1 100 004 01	CEDANIC	0.001	1.09	EOV
C284 C285	1-136-803-11		560PF 100PF	5%	630V 630V	C702 C703	1-162-294-31 1-124-902-00		0. 001uF 0. 47uF	10% 20%	50V 50V
	1-136-433-11 1-130-468-00			5%						20%	50V
C286			560PF	5%	50V	C704	1-164-159-11		0. 1uF		
C501	1-126-022-11	ELECT	47uF	20%	25V	C705	1-164-159-11		0. 1uF	900	50V
CEOR	1-126-022-11	EI ECT	47E	200	25V	C707	1-126-923-11	ELECT	220uF	20%	10V
C502	1-126-022-11		47uF	20%	50V	0700	1-124-477-11	EI EOT	47E	200	25V
C503			0. 0039uF	5%	1	C708			47uF	20%	
C504	1-136-164-00		0. 082uF	5%	50V	C709	1-124-907-11	ELECI	10uF	20%	50V
C505	1-124-902-00	ELECT	0. 47uF	20%	50V	C710-7		CEDANIC	0 1	*	500
C507-5		EI EOT	0.0	0.00	1007	anna	1-164-159-11		0. 1uF	ขาด	50V
	1-124-925-11	ELECT	2. 2uF	20%	100V	C803	1-124-556-11		2200uF	20%	16V
0510	1 104 007 11	EI EOT	10F	200	5077	C804	1-124-556-11	ELECI	2200uF	20%	16V
C510 C511	1-124-907-11		10uF 0. 047uF	20%	50V	0000	1-124-477-11	EI EOT	47P	900	0.517
C521	1-136-161-00 1-124-994-11		0. 047ur 100uF	5% 20%	50V	C806 C808	1-124-477-11		47uF 2200uF	20% 20%	25V 10V
C522	1-124-994-11		100ur 100uF	20%	10V 10V	C809	1-124-999-11		2200uF	20%	10V
C531	1-126-022-11		47uF	20%	25V	C810	1-124-993-11		10uF	20%	50V
0331	1-120-022-11	FLEGI	4/ur	20/9	234		1-124-307-11				
C532	1-126-022-11	FIFCT	47uF	20%	25V	C811	1-170-330-11	EPEA1	3300uF	20%	16V
C534	1-120-022-11		47ur 1uF	20%	50V	C813	1-124-907-11	FIFCT	10uF	20%	50V
	1-124-903-11		10uF		1	C814	1-124-907-11		100r 1000uF		6. 3V
C535 C536	1-124-907-11		10ur 10uF	20% 20%	50V 50V	C815				20%	
							1-124-564-11		4700uF	20%	25V
C542	1-124-907-11	EPE01	10uF	20%	50V	C816	1-124-907-11		10uF	20%	50V
CEAO	1_19#_007_11	FIFCT	10E	200	507/	C817	1-126-768-11	EPECI	2200uF	20%	16V
C543 C563	1-124-907-11 1-162-217-31		10uF 56PF	20%	50V 50V	C010	1-124-122-11	FIECT	100	20°	EUM
0303	1-104-411-91	OLIMBILO	JULI	5%	201	C818	1 -164-166-11	EPEO1	100uF	20%	50V

Ref. No.	Part No.	Description		. Ren	nark	Ref. No.	Part No.	Descr	ription		Remark
C819	1-126-947-11		47uF	20%	35V	D816	8-719-987-63	DIODE	1N4148M		-
C820	1-164-159-11	CERAMIC	0. 1uF		50V	D817	8-719-001-70	DIODE	UZL-12M1		
							8-719-200-77				
		< CONNECTOR >					8-719-200-77				
#11F04	4 500 000 44				ľ	D820	8-719-000-93	DIODE	UZL-7H1		
		SOCKET, CONNECT		/							
		PIN, CONNECTOR		ZP (EXCI	PT E)	D822	8-719-987-63				
		SOCKET, CONNECT				D823	8-719-312-09	DIODE	RBA-402		
		SOCKET, CONNECT PIN, CONNECTOR						< IC	>		
* CND518	1-564-337-00	PIN, CONNECTOR	3P			10501	8-752-059-55	IC :	CXA1331S		
		PIN, CONNECTOR					8-759-000-49		MC14066BCP		
		PLUG, CONNECTOR			1		8-752-060-64		CXA1198AP		
* CNE522	1-564-505-41	PLUG, CONNECTOR	2P (K707ES	S, K711S)			8-759-106-56		uPC1297CA		
* CNE701	1-564-506-11	PLUG, CONNECTOR	3P				8-759-111-44		uPC4570C-1		
* CNE702	1-564-505-11	PLUG, CONNECTOR	2P			IC506	8-752-059-55	IC	CXA1331S		
* CNE801	1-564-513-11	PLUG, CONNECTOR	10P				8-759-634-51		M5218AP		
* CNN515	1-560-062-00	PIN, CONNECTOR	4P			IC508	8-759-145-58		uPC4558C		
* CNN516	1-560-062-00	PIN, CONNECTOR	4P				8-759-145-58		uPC4558C		
* CNN517	1-560-061-00	PIN, CONNECTOR	3P (K707ES,	K711S)		IC510	8-759-634-50	IC	M5218AL		
* CNN517	1-560-060-00	PIN, CONNECTOR	2P (K611S)			IC511	8-759-000-49	IC	MC14066BCP		
* CNP513	1-564-707-11	PIN, CONNECTOR	(SMALL TYPE	E) 5P		IC512	8-759-000-49	IC I	MC14066BCP		
* CNP514	1-564-707-11	PIN, CONNECTOR	(SMALL TYPE	E) 5P		IC701	8-759-060-83	IC I	M50941-728SP		
						IC702	8-759-240-69	IC '	TC4069UBP		
		< DIODE >				IC703	8-759-973-95	IC	BA6219B		
D101	8-719-987-63	DIODE 1N4148M				IC704	8-759-822-09	IC	LB1641		
	8-719-987-63					IC801	8-759-145-58	IC -	uPC4558C		
D201	8-719-987-63										
	8-719-987-63	DIODE 1N4148M						< JAC	K >		
D501-5		DIODE ANALAOM									4
	8-719-987-63	DIODE 1N4148M				J501	1-573-070-11	JACK,	PIN 4P (LINE	IN/OUT)	(K707ES)
D518-52	91									IN/00T)	(K711S, K611S)
2010 02	8-719-107-94	DIODE 1SS202-	1			J502	1-507-796-71	JAUN	(NEADPHUNES)		
D522	8-719-987-63							< COII			
D701-70	)7							\ 0011	u /		
B. 80.0	8-719-987-63						1-410-778-11			nН	
	8-719-933-33						1-410-780-11			nH	
D709	8-719-933-33	DIODE HZS6A1L					1-410-778-11				
D712-71	15					L241	1-410-780-11	INDUC	ror 27n	ıH	
	8-719-987-63							< FILT	TER >		
D718	8-719-987-63	DIODE 1N4148M									
D801-80						LPF101	1-239-599-11	FILTER	R, LOW PASS		
	8-719-200-77					LPF201	1-239-599-11	FILTER	R, LOW PASS		
	8-719-933-33										
D806	8-719-933-33	DIODE HZS6A1L						< TRAM	SISTOR >		
	8-719-987-63					Q101	8-729-142-25	TRANSI	ISTOR 2SD102	O-HFE	
	8-719-987-63					Q102	8-729-142-25	TRANSI	STOR 2SD102	O-HFE	
	8-719-200-31					Q103	8-729-900-74	TRANSI	STOR DTC143	TS	
	8-719-000-78					Q104	8-729-900-80	TRANSI	STOR DTC114	ES	
D815	8-719-987-63	DIODE 1N4148M				Q201	8-729-142-25	TRANSI	STOR 2SD102	O-HFE	

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description			Remark
Q202	8-729-142-25	TRANSISTOR	2SD1020-HFE				< RESISTOR >			
Q203	8-729-900-74	TRANSISTOR	DTC143TS							
Q204	8-729-900-80	TRANSISTOR	DTC114ES		R101	1-259-460-11	CARBON	22K	5%	1/6W
Q501	8-729-620-05		2SC2603-EF		R104	1-259-440-11		3. 3K		1/6W
Q502	8-729-620-05		2SC2603-EF		R105	1-259-450-11		8. 2K		1/6W
Ø002	0 725 020 00	TRUMBIBION	ZDOZOGO LI		R106	1-259-461-11		24K	5%	1/6W
Q503	8-729-922-37	TDANCICTOD	2SD2144S-UVW		R107	1-259-422-11		560	5%	1/6W
-					uto,	1-239-422-11	CARDON	300	J/0	1/04
Q504	8-729-900-80		DTC114ES		D4.00	4 050 400 44	d a DDON	0 017	F0,	4 /000
Q505	8-729-119-76		2SA1175-HFE		R109	1-259-436-11		2. 2K		1/6W
Q506	8-729-142-25		2SD1020-HFE		R110	1-259-436-11		2. 2K		1/6W
Q507	8-729-900-80	TRANSISTOR	DTC114ES		R111	1-259-467-11		43K	5%	1/6W
					R112	1-259-428-11		1K	5%	1/6W
Q508	8-729-119-76		2SA1175-HFE		R113	1-259-476-11	CARBON	100K	5%	1/6W
Q509	8-729-900-80		DTC114ES							
Q510	8-729-900-80		DTC114ES		R115	1-259-436-11	CARBON	2. 2K		1/6W
Q511	8-729-194-57	TRANSISTOR	2SC945-P		R116	1-259-452-11	CARBON	10K	5%	1/6W
Q512	8-729-194-57	TRANSISTOR	2SC945-P		R117	1-259-452-11	CARBON	10K	5%	1/6W
					R118	1-259-447-11	CARBON	6. 2K	5%	1/6W
Q513-5	517				R119	1-259-456-11	CARBON	15K	5%	1/6W
	8-729-900-80	TRANSISTOR	DTC114ES	·						
Q518	8-729-900-89	TRANSISTOR	DTC144ES		R120	1-259-468-11	CARBON	47K	5%	1/6W
Q519	8-729-900-89	TRANSISTOR	DTC144ES		R121	1-259-466-11	CARBON	39K	5%	1/6W
Q701-7	08						(K707ES)			
	8-729-900-61	TRANSISTOR	DTA114ES		R121	1-259-476-11	CARBON	100K	5%	1/6W
Q709	8-729-620-05	TRANSISTOR	2SC2603-EF				(K711S, K611S)			
					R122	1-259-402-11	CARBON	82	5%	1/6W
Q710	8-729-900-80	TRANSISTOR	DTC114ES		R123	1-259-479-11		130K		1/6W
Q711	8-729-900-65		DTA144ES							-,
Q712	8-729-900-80		DTC114ES		R124	1-259-446-11	CARBON	5. 6K	5%	1/6W
Q713	8-729-900-65		DTA144ES		R125	1-259-434-11		1. 8K		1/6W
Q714	8-729-620-05		2SC2603-EF		R126	1-259-435-11		2K	5%	1/6W
4	0 .20 020 00	111110101010	2002000 11		R127	1-259-484-11		220K		1/6W
Q715	8-729-900-89	TRANSISTOR	DTC144ES		R134	1-259-461-11		24K	5%	1/6W
Q716	8-729-900-89		DTC144ES		ictor	1 200 401 11	Omtoon	2-111	0.0	1/011
Q717-7		TIEMBIBIOIC	D1014460		R135	1-259-422-11	CARRON	560	5%	1/6W
WIII I	8-729-900-61	DANGIGIOD	DTA114ES		R142	1-259-442-11		3. 9K		1/6W
Q723	8-729-900-65		DTA144ES		R143	1-259-440-11		3. 3K		1/6W
Q723	8-729-900-65		DTA144ES							
Q124	0-729-800-90	INANSISION	DIAI44ES		R144	1-259-452-11		10K 2. 2K	5%	1/6W
0725	8-729-900-80	TRANCICTOR	DTC114EC		R145	1-259-436-11	CARDUN	Z. ZN	3%	1/6W
Q725	8-729-900-65		DTC114ES DTA144ES		D1.4C	1 050 444 11	CARRON	4 717	En.	1 /00
Q726					R146	1-259-444-11		4. 7K		1/6W
Q727	8-729-900-65		DTA144ES		R147	1-259-444-11		4. 7K		1/6W
Q729	8-729-900-61		DTA114ES		R148	1-259-484-11		220K		1/6W
Q801	8-729-900-61	TRANSISTOR	DTA114ES		R151	1-259-460-11		22K	5%	1/6W
0000		mp i va ramop	Dma44 4770		R152	1-259-436-11	CARBON	2. 2K	5%	1/6W
Q802	8-729-900-80		DTC114ES							
Q803	8-729-141-83		2SB1094-LK		R153	1-259-459-11		20K	5%	1/6W
Q804	8-729-209-15		2SD2012		R154	1-259-412-11		220	5%	1/6₩
Q805	8-729-209-15		2SD2012		R161	1-259-462-11		27K	5%	1/6W
Q806	8-729-620-05	TRANSISTOR	2SC2603-EF		R162	1-259-471-11	CARBON	62K	5%	1/6W
					R163	1-259-414-11	CARBON	270	5%	1/6W
Q807	8-729-900-80	TRANSISTOR	DTC114ES							
Q808	8-729-141-83	TRANSISTOR	2SB1094-LK		R164	1-259-456-11	CARBON	15K	5%	1/6W
Q809	8-729-620-05	TRANSISTOR	2SC2603-EF		R165	1-259-431-11	CARBON	1. 3K	5%	1/6W
Q810	8-729-119-76	TRANSISTOR	2SA1175-HFE		R166	1-259-436-11	CARBON	2. 2K	5%	1/6W
Q811	8-729-140-04	TRANSISTOR	2SB1116A-L		R167	1-259-458-11	CARBON	18K	5%	1/6W
					R168	1-259-468-11	CARBON	47K	5%	1/6W
				,		,				

Ref. No.	Part No.	Description			Remark	R	lef. No.	Part No.	Description	<u> </u>		Re	mark
R181	1-259-450-11	CARBON	8. 2K	5%	1/6W		R264	1-259-456-11	CARBON	15K	5%	1/6W	
		(K707ES)					R265	1-259-431-11		1. 3K	5%	1/6W	
R181	1-259-446-11	CARBON	5.6K	5%	1/6W		R266	1-259-436-11	CARBON	2. 2K	5%	1/6W	
		(K711S, K611S)					R267	1-259-458-11	CARBON	18K	5%	1/6W	
R182	1-259-464-11		33K	5%	1/6W		R268	1-259-468-11	CARBON	47K	5%	1/6W	
	[1-219-153-11		10	5%	1/4W F								
R184	1-247-883-00		150K		1/4W		R281	1-259-450-11	(K707ES)	8. 2K		1/6W	
R201	1-259-460-11		22K	5%	1/6W		R281	1-259-446-11		5. 6K	5%	1/6W	
R204	1-259-440-11		3. 3K		1/6W				(K711S, K611		=0.	4 (0111	
R205	1-259-450-11		8. 2K		1/6W		R282	1-259-464-11		33K	5% 5%	1/6W	r.
R206	1-259-461-11		24K	5%	1/6W			1-219-153-11		10	5%	1/4W	r
R207	1-259-422-11	CARDON	560	5%	1/6W		R284	1-247-883-00	CARDUN	150K	3%	1/4W	
R209	1-259-436-11	CARBON	2. 2K	5%	1/6W	İ	R501	1-249-417-11	CARBON	1K	5%	1/4W	F
R210	1-259-436-11		2. 2K		1/6W		R502	1-215-455-00		27K	1%	1/6W	•
R211	1-259-467-11		43K	5%	1/6W		R504	1-249-413-11		470	5%	1/4W	F
R212	1-259-428-11		1K	5%	1/6W				(K611S)			,	
R213	1-259-476-11		100K	5%	1/6W		R505	1-249-427-11	CARBON	6.8K	5%	1/4W	F
							R506	1-249-381-11	CARBON	1	5%	1/4W	F
R215	1-259-436-11	CARBON	2. 2K	5%	1/6W				(K707ES, K71	l1S)			
R216	1-259-452-11		10K	5%	1/6₩								
R217	1-259-452-11		10K	5%	1/6W		R507	1-247-848-11		5. 1K	5%	1/4W	
R218	1-259-447-11		6. 2K		1/6W		R508	1-249-433-11		22K	5%	1/4W	
R219	1-259-456-11	CARBON	15K	5%	1/6W		R509	1-249-436-11		39K	5%	1/4W	_
							R510	1-249-421-11		2. 2K		1/4W	
R220	1-259-468-11		47K	5%	1/6W		R511	1-249-421-11	CARBON	2. 2K	5%	1/4W	F
R221	1-259-466-11		39K	5%	1/6W		DE 4.0		a. ppou	4007	=0.	4 (417)	
D001	1 050 470 11	(K707ES)	1007	FΩ	4 /CW		R512	1-249-441-11		100K		1/4W	
R221	1-259-476-11		100K	5%	1/6W		R513	1-249-441-11 1-247-836-11		100K		1/4W	
R222	1-259-402-11	(K711S, K611S)	82	5%	1/6W	İ	R514	1-247-630-11		1. 6K 47K		1/4W 1/4W	
R223	1-259-402-11		oz 130K		1/6W		R516 R517	1-249-437-11		22K	5% 5%	1/4W	
11220	1 200 475 11	OMIDON	10011	0.70	1/011		11017	1 240 400 11	OMIDON	2211	070	1/ 711	
R224	1-259-446-11	CARBON	5. 6K	5%	1/6W		R518	1-249-427-11	CARBON	6. 8K	5%	1/4W	F
R225	1-259-434-11		1. 8K		1/6W		R519	1-249-437-11		47K	5%	1/4W	
R226	1-259-435-11	CARBON	2K	5%	1/6W		R520	1-249-434-11	CARBON	27K	5%	1/4W	
R227	1-259-484-11		220K	5%	1/6W		R521	1-247-704-11	CARBON	220	5%	1/4W	
R234	1-259-461-11	CARBON	24K	5%	1/6W		R522	1-247-704-11	CARBON	220	5%	1/4W	
R235	1-259-422-11	CARBON	560	5%	1/6W		R523-5	25					
R242	1-259-442-11		3. 9K		1/6W			1-249-429-11	CARBON	10K	5%	1/4W	
R243	1-259-440-11	CARBON	3. 3K		1/6W		R526	1-249-422-11	CARBON	2. 7K		1/4W	F
R244	1-259-452-11	CARBON	10K	5%	1/6W		R527	1-249-437-11	CARBON	47K	5%	1/4W	
R245	1-259-436-11	CARBON	2. 2K	5%	1/6W		R528	1-249-441-11	CARBON	100K	5%	1/4W	
**	4 000 411	a.ma:			4 100		R529	1-249-431-11	CARBON	15K	5%	1/4W	
R246	1-259-444-11		4. 7K		1/6W								_
R247	1-259-444-11		4. 7K		1/6W		R531	1-249-417-11		1K	5%	1/4W	F
R248	1-259-484-11		220K		1/6W		R532	1-215-455-00		27K	1%	1/6W	
R251 R252	1-259-460-11 1-259-436-11		22K	5% =~	1/6W		R533	1-249-437-11		47K	5%	1/4W	
RZJZ	1-235-430-11	CARDON	2. 2K	5%	1/6W		R534	1-249-441-11		100K	5% 1%	1/4W	
R253	1-259-459-11	CARBON	20K	5%	1/6W		R535	1 410 404 00	INT TUP	24K	1%	1/6W	
R254	1-259-412-11		220	5%	1/6W		R563	1-249-441-11	CARRON	100K	5%	1/4W	
R261	1-259-462-11		27K	5%	1/6W		R564	1-249-429-11		100K	5%	1/4W	
R262	1-259-471-11		62K	5%	1/6W		R565	1-249-441-11		100K		1/4W	
R263	1-259-414-11		270	5%	1/6W		R566	1-249-428-11		8. 2K		1/4W	F
					•		R567	1-249-441-11		100K		1/4W	
							The co	mponents ident	tified by L	es composa	nts	identifi	és
								or dotted li	1	ar une mar			
							mark.	<u>∧</u> are critica	I	ritiques p			ité.
							1	. Replace only	1				r une pièce
							part n	umber specifie	ed. p	ortant le	numé	ro spéci	fié.



Ref. No.	Part No.	Description			Re	emark 	Ref. No.	Part No.	Description			Re	marl
R568	1-249-423-11	CARBON	3. 3K	5%	1/4W	F	R607	1-247-874-11	CARBON	62K	5%	1/4W	
R569	1-249-441-11	CARBON	100K	5%	1/4W		R608	1-249-437-11	CARBON	47K	5%	1/4W	
R570	1-249-429-11	CARBON	10K	5%	1/4W		R609	1-247-882-11	CARBON	130K	5%	1/4W	
R571	1-249-429-11	CARBON	10K	5%	1/4W				(K707ES)				
R572	1-249-417-11	CARBON	1K	5%	1/4W	F	R609	1-247-880-11	CARBON (K711S, K611S)	110K	5%	1/4W	
R581	1-249-429-11	CARBON	10K	5%	1/4W		R610	1-247-876-11	CARBON	75K	5%	1/4W	
R582	1-249-429-11	CARBON	10K	5%	1/4W				(K707ES)				
R583	1-249-414-11	CARBON	560	5%	1/4W	F							
		(K707ES)					R610	1-247-878-00	CARBON	91K	5%	1/4W	
R583	1-247-822-11	CARBON	430	5%	1/4W				(K711S, K611S)				
		(K711S, K611S)					R611	1-249-438-11	CARBON	56K	5%	1/4W	
R584	1-249-417-11	CARBON	1K	5%	1/4W	F			(K707ES)				
							R611	1-249-439-11	CARBON	68K	5%	1/4W	
R585	1-249-433-11	CARBON	22K	5%	1/4W				(K711S, K611S)				
		(K707ES)					R612	1-247-887-00	CARBON	220K	5%	1/4W	
R585	1-247-862-11	CARBON	20K	5%	1/4W		R613	1-247-876-11	CARBON	75K	5%	1/4W	
		(K711S, K611S)							(K707ES)				
R586	1-249-417-11		1K	5%	1/4W	F							
R587	1-249-436-11		39K	5%	1/4W		R613	1-249-439-11		68K	5%	1/4W	
		(K707ES, K711S)							(K711S, K611S)				
R587	1-249-440-11	CARBON	82K	5%	1/4W	(K611S)	R614	1-247-872-11		51K	5%	1/4W	
							R616	1-249-437-11		47K	5%	1/4W	
R588	1-249-436-11		39K	5%	1/4W				(K707ES)		=		
2500	4 040 440 44	(K707ES, K711S)		F0:	4 /400	(110449)	R616	1-247-874-11		62K	5%	1/4W	
R588	1-249-440-11		82K	5%		(K611S)	2015		(K711S, K611S)	0011	<b>F</b> 0.	4 (400	
R589	1-249-391-11		6.8	5%	1/4W	F	R617	1-249-440-11		82K	5%	1/4W	
2500	4 040 000 44	(K707ES, K711S)	- 0	F0:	4 (0111				(K707ES)				
R589	1-249-390-11		5.6	5%	1/6W	r	DC4.7	4 047 074 11	CARRON	0.017	E0/	1 /400	
DEOO	1 040 201 11	(K611S)	r n	E0v	1 /410	r l	R617	1-247-874-11		62K	5%	1/4W	
R590	1-249-391-11		6.8	5%	1/4W	r	DC10	1 947 000 00	(K711S, K611S)	1 E O V	E0/	1 /450	
		(K707ES, K711S)					R618	1-247-883-00	(K707ES)	150K	5%	1/4W	
R590	1-249-390-11	CARRON	5. 6	5%	1/6W	F	R618	1-247-886-11	,	200K	5%	1/4W	
11330	1 243 330 11	(K611S)	J. U	J/0	1/011	1	1010	1 247 000 11	(K711S, K611S)	20011	JA	1/411	
R591	1-249-421-11		2. 2K	5%	1/4W	F	R619	1-249-435-11		33K	5%	1/4W	
R593	1-249-435-11		2. ZK 33K	5%	1/4W	r	R701	1-247-887-00		220K		1/4W	
R594	1-249-420-11		1. 8K		1/4W	F	11701	1 247 667 00	OMIDON	ZZUN	J <i>1</i> 0	1/411	
R601	1-247-878-00		91K	5%	1/4W		R702	1-247-887-00	CARRON	220K	5%	1/4W	
	0,0 00	(K707ES)	0.111	0.0	1, 111		R703	1-249-436-11		39K		1/4W	
		,,					R704	1-247-887-00		220K		1/4W	
R601	1-249-439-11	CARBON	68K	5%	1/4W		R705	1-249-436-11		39K	5%	1/4W	
_		(K711S, K611S)					R706	1-247-887-00		220K		1/4W	
R602	1-249-435-11		33K	5%	1/4W			00. 00			0	-,	
R603	1-247-878-00		91K	5%	1/4W		R707	1-249-431-11	CARBON	15K	5%	1/4W	
		(K707ES)			_,		R708	1-247-868-11		36K	5%	1/4W	
R603	1-249-437-11		47K	5%	1/4W		R709	1-249-435-11		33K	5%	1/4W	
		(K711S, K611S)		-	,		R710	1-249-435-11		33K	5%	1/4W	
R604	1-247-876-11		75K	5%	1/4W		R711	1-247-872-11		51K	5%	1/4W	
		(K707ES)			-,		****					-,	
		•					R712-7	17					
R604	1-247-874-11	CARBON	62K	5%	1/4W			1-249-435-11	CARBON	33K	5%	1/4W	
		(K711S, K611S)			,		R719	1-249-429-11		10K	5%	1/4W	
R605	1-249-439-11		68K	5%	1/4W		<b><u>∧</u>R720</b>	1-212-954-11		6.8	5%	1/2W	F
		(K707ES)					R721	1-249-429-11		10K	5%	1/4W	
R605	1-249-441-11		100K	5%	1/4W		R722	1-249-431-11		15K	5%	1/4W	
R606	1-249-433-11	(K711S, K611S) CARBON	22K	5%	1/4W		R723	1-247-834-11	CARBON	1. 3K	5%	1/4W	

mark extstyle

mark.  $\underline{\Lambda}$  are critical for

safety. Replace only with

part number specified.

par une marque  $\Delta$  sont

critiques pour la sécurité.

portant le numéro spécifié.

Ne les remplacer que par une pièce

### MD

Ref. No.	Part No.	Description	on 		Re	mark	Ref. No.	Part No.	Description Remark
	1-249-424-11	CARBON	3. 9K		1/4W	F	RV221	1-241-629-11	RES, ADJ, CARBON 4.7K
R725	1-247-834-11		1. 3K		1/4W				RES, ADJ, CARBON 22K
R726	1-249-427-11		6.8K	5%	1/4W	F	RV242	1-238-019-11	RES, ADJ, CARBON 47K
R727	1-249-430-11		12K	5%	1/4W				RES, ADJ, CARBON 22K
<u>↑</u> R728	1-212-952-00	FUSIBLE	5. 6	5%	1/2W	F	RV501	1-223-328-11	RES, VAR, CARBON 50K/50K (REC LEVEL)
R729	1-249-435-11	CARBON	33K	5%	1/4W		RV502	1-223-331-11	RES, VAR, CARBON 50K/50K (BALANCE)
R730	1-249-435-11	CARBON	33K	5%	1/4W		RV504	1-241-629-11	RES, ADJ, CARBON 4.7K (K707ES/K711S)
R731	1-249-425-11	CARBON	4. 7K	5%	1/4W	F	RV505	1-223-330-11	RES, VAR, CARBON 20K/20K (PHONE LEVEL)
R732	1-249-417-11	CARBON	1K	5%	1/4W	F	RV508	1-238-021-11	RES, ADJ, CARBON 220K (K707ES)
R733	1-247-903-00	CARBON	1M	5%	1/4W		RV508	1-223-387-21	RES, ADJ, CARBON 330K (K711S, K611S)
R735	1-249-421-11	CARBON	2. 2K	5%	1/4W	F			< TRANSFORMER >
<u>1</u> R736	1-212-942-00		2. 2	5%	1/2W				Transi orangi /
R737-				0.0	2, 2	•	T181	1-433-344-11	TRANSFORMER, BIAS OSCILLATION
	1-249-429-11	CARRON	10K	5%	1/4W		T281		TRANSFORMER, BIAS OSCILLATION
R740	1-249-425-11		4. 7K		1/4W	F	T501		TRANSFORMER, BIAS OSCILLATION
R742-		ornibon.	1. 111	0.0	1/ 111		1301	1 400 000 11	(K707ES, K711S)
	1-249-441-11	CARBON	100K	5%	1/4W		T501	1-423-621-11	TRANSFORMER, BIAS OSCILLATION (K611S)
R745	1-249-432-11	CARBON	18K	5%	1/4W				< TEST PIN >
R746-	1-249-429-11	CARBON	10K	5%	1/4W		* TP581	1-564-506-11	PLUG, CONNECTOR 3P
R752-									,
	1-249-441-11		100K		1/4W				< VIBRATOR >
R799	1-249-405-11		100	5%	1/4W				
R802	1-249-425-11	CARBON	4. 7K	5%	1/4₩	F	X701		VIBRATOR, CERAMIC (4.19MHz)
R803	1-249-420-11	CARBON	1. 8K	5%	1/4W	F	*****	*****	**************************************
R804	1-249-412-11		390	5%	1/4W		*	1-632-740-11	MD ROARD
R805	1-249-427-11		6. 8K		1/4W			1 002 / 10 11	*****
R806	1-249-419-11		1. 5K		1/4W				
R807	1-249-429-11		10K	5%	1/4W	•		3-356-631-01	HOLDER (SENSOR)
R808	1-249-419-11	CADRON	1. 5K	E0/	1/4W	r			/ COMMECTOD >
R809	1-249-425-11		1. JK 4. 7K		1/4W		,		< CONNECTOR >
R810	1-249-409-11			5%	1/4W		CN1001	1_506_615_11	PIN, CONNECTOR 9P
R811	1-249-417-11			5%	1/4W				PIN, CONNECTOR 8P
R812	1-249-427-11		6. 8K		1/4W		UN1002	1-304-301-11	FIN, CONNECTOR OF
HOLL	1 243 427 11	CALDON	0. OK	J/0	1/411	ı			< IC >
R813	1-249-427-11	CARBON	6.8K	5%	1/4W	F			
R814	1-249-417-11	CARBON	1K	5%	1/4W	F	IC1001	8-749-920-97	DIODE GP2S22B
R815-8							1	8-749-920-97	
nc:	1-249-425-11		4. 7K		1/4W	F			
R818	1-249-433-11		22K	5%	1/4W				< RESISTOR >
R819	1-249-436-11	CARBON	39K	5%	1/4W				
DOCC	4 040 400 55	albber.		E0:	4 /			1-249-408-11	
R820	1-249-429-11			5%	1/4W		R1002	1-249-408-11	CARBON 180 5% 1/4W F
R821	1-249-437-11			5%	1/4W				
\R825	1-219-135-11		0. 15		1/4W				< SWITCH >
∠R826	1-219-137-11	rus1BLE	0. 33	10%	1/4W	F	54000	1 570 050 41	CHITTOIL DUOL (4 1777) (5007)
		< VARIABIE	RESISTOR >						SWITCH, PUSH (1 KEY) (DOOR)
		✓ TAILLADLE	urololou >				1		SWITCH, PUSH (1 KEY) (CLOSE)
RV191	1-241-629-11	REG ADI	CARRON 4 712						SWITCH, PUSH (1 KEY) (OPEN)
	1-241-631-11								SWITCH, LEAF (FWD)
	1-238-019-11						21000	I 017_707_TT	SWITCH, LEAF (HALF)
	1-241-631-11						S1007	1-572-125-11	SWITCH, LEAF (METAL)
								mponents ident	
							1	∖or dotted li	
	ė.							⚠ are critica	
								Replace only	
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part number specified.

portant le numéro spécifié.

# MD PANEL REEL MOTOR

Ret. No.	Part No.	Description			Re	emark	Ref. No.	Part No.	Descrip	tion			Re	emar!
S1008	1-572-125-11	SWITCH, LEAF (7	(0)		_				< VARIA	BLE RES	ISTOR >	<b>&gt;</b>	_	
		< TERMINAL >						1-223-329-11 1-223-327-11						ر.)
* TB1001	1-694-018-11	TERMINAL (5P)					RYJOU	1-223-327-11			ON TON	(DINO)		
*****	******	*******	*****	*****	*****	****			< SWITC	H >				
*	A-2006-964-A	PANEL BOARD, CO					S501	1-692-410-11						
		*****	*****					1-571-305-11					'ILTER)	
							S701	1-692-478-11						
k	3-386-245-01	HOLDER (FL)					1	1-554-303-21				PEN/CL	OSE)	
		( gollungmon )					S752	1-554-303-21	SWITCH,	TACTIL	E (■)			
		< CONNECTOR >						4 *** 4 000 04			~ (44)			
avroo	4 500 000 44	goguna govunga	OD 44B				S753	1-554-303-21						
		SOCKET, CONNECT						1-554-303-21						
		SOCKET, CONNECT						1-554-303-21						
CN902	1-568-802-11	SOCKET, CONNECT	OR 19P					1-554-303-21						
		< DIODE >					S757	1-554-303-21	SWITCH,	TACTIL	E ( <b>11</b> )			
		( DIODE )					S758	1-554-303-21	SWITCH	TACTIL	E (0)			
D751	8-719-987-63	DIODE 1N4148M						1-554-303-21			, - ,	(T)		
	8-719-987-63							1-554-303-21	,			,		
2102	0 /10 00/ 00	DIODE INTITION						1-554-303-21			,	,		
		< FLUORESCENT I	NDICAT	OR >			1	1-554-303-21					N)	
FLT751	1-517-163-11	INDICATOR TUBE,	FLUOR	ESCEN	Т		S801	1-692-409-11	SWITCH.	PUSH (	1 KEY)	(POWER	)	
							******	******		,	,	,		***
		< IC >	**				*	1-632-741-11	REFI MO	TOR ROA	SD			
IC751	8-741-100-48	IC SBX1610-59						1 002 711 11		******				
		< RESISTOR >							< CAPAC	ITOR >				
R141	1_950_444_11	CADDON	A 7V	E0v	1/6W		01051	1 194 007 11	DI DOT		10E		900	E1
R241	1-259-444-11		4. 7K					1-124-907-11			10uF		20%	50
	1-259-444-11		4. 7K		1/6W			1-124-907-11			10uF		20%	5(
R749	1-249-429-11 1-247-862-11		10K 20K		1/4W		61053	1-164-159-11	CERAMIC		0. 1uF			50
R750	1-247-866-11		20K 30K	5% 5%	1/4W 1/4W				< CONNE	CTOR >				
	1 21, 000 11	O'MADON	oon	0.0	1/ 111				COMME	oron >				
	1-249-441-11	CARBON	100K	5%	1/4W			1-564-499-11						
R755-7							* CN1052	1-564-718-11	PIN, CO	NNECTOR	(SMALL	TYPE)	2P	
	1-249-441-11		100K		1/4W		* CN1053	1-564-718-11	PIN, CO	NNECTOR	(SMALL	TYPE)	2P	
R759	1-247-838-00		2K	5%	1/4W									
R760	1-249-422-11		2. 7K		1/4W	F			< RESIS	TOR >				
R761	1-249-426-11	CARBON	5. 6K	5%	1/4W		D1051	1-2/0-/1/-11	CADDON		260	E0/	1 /#W	D
R762	1-247-856-00	CARBON	11K	5%	1/4W			1-249-414-11 ******		*****	560 *****	5% *****	1/4W *****	
R763	1-247-838-00	CARBON	2K	5%	1/4W									
	1-247-866-11		30K	5%	1/4W									
R764	1-247-838-00		2K	5%	1/4W									
R766	1 11 000 00				1/4W									
	1-247-852-11	CARBON	7. 5K	0.0	1/311		1							
R766 R768	1-247-852-11													
R766 R768		CARBON	7. 5K 11K 100K	5%	1/4W 1/4W									

Ref. No.	Part No.	Description Remark	Ref. No.
		MISCELLANEOUS	
		******	
16	1-690-893-11	WIRE (FLAT TYPE) (19 CORE)	
17	1-751-258-11	WIRE (FLAT TYPE) (25 CORE)	
18	1-534-517-00	WIRE, FLAT TYPE (11 CORE)	*
<b> 1</b> 57	1-551-188-XX	CORD, POWER (E)	*
<b>1</b> 57	1-558-945-21	CORD, POWER (POLAR. SPT-1) (US, Canadian)	*
<b><u>1</u>61</b>	1-696-845-11	CORD, POWER (AUS)	*
<b></b> ∆62	1-696-586-11	CORD, POWER (UK)	
<b><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u> 64</b>	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
<b><u>1</u>65</b>	1-575-651-21	CORD, POWER (AEP, G)	
* 225	1-608-268-00	ERASE HEAD BOARD (K707ES, K711S)	
D1051	8-719-980-85	DIODE SLF325C	
HE1001	1-543-673-11	HEAD, MAGNETIC (ERASE) (K611S)	
HE1001	1-543-836-11	HEAD, MAGNETIC (ERASE) (K707ES, K711S)	
HRP100	11-543-733-11	HEAD, MAGNETIC (RECORD/PLAYBACK) (K611S)	
HRP100	11-543-834-11	HEAD, MAGNETIC (REC/PB) (K711S)	
HRP100	11-543-835-11	HEAD, MAGNETIC (REC PB) (K707ES)	
M1051	X-3356-638-1	MOTOR (REEL R) ASSY	
M1052	X-3356-604-1	MOTOR (ASSIST) ASSY	
M1053	X-3356-635-1	MOTOR (CAPSTAN R2) ASSY (K707ES, K711S)	
M1053	X-3356-646-1	MOTOR (CAPSTAN V1) ASSY (K611S)	
∕NPT901	1-423-475-11	TRANSFORMER, POWER (US, Canadian)	*****
		TRANSFORMER, POWER (AEP, UK, G, AUS)	
_		TRANSFORMER, POWER (E)	
		ENCODER, ROTARY	
		SELECTOR, POWER VOLTAGE (VOLTAGE) (E)	
			#1
*****	*****	*************	#2

The components identified by Les composants identifiés mark ⚠ or dotted line with mark. A are critical for safety. Replace only with part number specified.

par une marque A sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
		S & PACKING MATERIALS	
	1 550 071 11	CODD CONNECTION	
		CORD, CONNECTION	
_		CORD, CONNECTION	
*	3-350-830-01		
*		INDIVIDUAL CARTON (K707ES)	
*	3-388-323-21	INDIVIDUAL CARTON (K711S)	
*	3-388-323-31	INDIVIDUAL CARTON (K611S)	
		MANUAL, INSTRUCTION (ENGLISH,	RENCH
	0 700 202 11	SPANISH, CHINESE) (K707ES: Canac	,
	3-756-292-21	MANUAL, INSTRUCTION (ENGLISH)	tidii, b/
	0 100 202 21	(K707ES:US, AUS)	
	3-756-293-11	MANUAL, INSTRUCTION (ENGLISH, E	RENCH
	0 100 200 11	SPANISH, PORTUGUESE)	ittitori,
		(K711S: AEP/K611S: Canadian, AEP)	
	3_756_903_91	MANUAL, INSTRUCTION (ENGLISH)	
	3 730 233 21	(K611S:US, UK, AUS)	
		(NUT13.US, UR, AUS)	
	3-756-293-41	MANUAL, INSTRUCTION (GERMAN, DU	JTCH.
		SWEDISH, ITALIAN) (K711S: AEP/K6	S11S:AEP
	3-756-293-51	MANUAL, INSTRUCTION (GERMAN)	
		(K711S:G/K611S:G)	
	3-756-293-61	MANUAL, INSTRUCTION (DANISH, F)	(HRINN
	0 100 200 01	(K611S: AEP)	
******	*****	(NOIIO. NLI )	r ale ale ale ale ale ale ale ale

### HARDWARE LIST

#1	7-621-255-20 SCREW +BVTT 2X4 (S)	
#2	7-621-255-35 SCREW +BVTT 2X5 (S)	
#3	7-621-772-18 SCREW +B 2X4 (K707ES, K711S)	
#4	7-621-772-20 SCREW +B 2X5 (K611S)	
#5	7-621-772-70 SCREW +B 2X14 (K707ES, K711S)	
#6	7-621-773-86 SCREW +B 2.6X4 (K707ES)	
#6	7-621-775-10 SCREW +B 2.6X4 (K711S)	
#7	7-685-871-01 SCREW +BVTT 3X6 (S)	
#8	7-621-849-00 SCREW (BV/RING)	
#9	7-622-205-05 NUT M2 TYPE2 (K707ES, K711S)	
#10	7-628-253-00 SCREW +PS 2X4 (K707ES, K711S)	
#11	7-671-154-01 STENLESS BALL (K707ES, K711S)	
#12	7-682-547-09 SCREW +BVTT 3X6 (S)	
	(K707ES: US, Canadian, E, K711S, K611S)	
#13	7-682-548-09 SCREW +BVTT 3X8 (S)	
#14	7-682-647-01 SCREW +PS 3X6 (K707ES, K711S)	
#15	7-685-133-19 SCREW +BTP 2.6X6 TYPE2 N-S	
#16	7-685-532-19 SCREW +BTP 2.6X5 TYPE2 N-S (K611S)	
#17	7-685-534-19 SCREW +BTP 2,6X8 TYPE2 N-S	
	7-685-646-79 SCREW +BVTP 3X8 TYPE2 N-S (K707ES:E)	
	7-685-870-01 SCREW +BVTT 3X5 (S) (K707ES, K711S)	
20	. see see se seemen bill one (o) (morab) millo)	٠